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## MACKENZIE VALLEY PIPELINE INQUIRY



IN THE MATTER OF APPLICATIONS BY EACH OF

(a) CANADIAN ARCTIC GAS PIPELINE LIMITED FOR A RIGHT-OF-WAY THAT MIGHT BE GRANTED ACROSS CROWN LANDS WITHIN THE YUKON TERRITORY AND THE NORTHWEST TERRITORIES, and

(b) FOOTHILLS PIPE LINES LTD. FOR A RIGHT-OF-WAY
THAT MIGHT BE GRANTED ACROSS CROWN LANDS
WITHIN THE NORTHWEST TERRITORIES

FOR THE PURPOSE OF A PROPOSED MACKENZIE VALLEY PIPELINE

and

IN THE MATTER OF THE SOCIAL, ENVIRONMENTAL AND ECONOMIC IMPACT REGIONALLY OF THE CONSTRUCTION, OPERATION AND SUBSEQUENT ABANDONMENT OF THE ABOVE PROPOSED PIPELINE

(Before the Honourable Mr. Justice Berger, Commissioner)

Yellowknife, N.W.T., August 16, 1976.

PROCEEDINGS AT INQUIRY

Volume 170





1	APPEARANCES:	
2	Mr. Ian G. Scott, Q.C., Mr. Stephen T. Goudge,	
3	Mr. Alick Ryder, and Mr. Ian Roland, for Mackenzie Valley Pipeline	
4	Inquiry;	
5	Mr. Pierre Genest, Q.C., Mr. Jack Marshall,	
6	Mr. Darryl Carter, and Mr. J.T. Steeves, for Canadian Arctic Gas Pipe- line Limited;	
7	- Cross-Eventhoram by any project	
8	Mr. Reginald Gibbs, Q.C., Mr. Alan Hollingworth, and Mr. John W. Lutes, for Foothills Pipe Lines Ltd.;	
10	Mr. Russell Anthony, Prof. Alastair Lucas and	
11	Mr. Garth Evans, for Canadian Arctic Resources Committee;	
12	Mr. Glen W. Bell and	
13	Mr. Gerry Sutton, for Northwest Territories Indian Brotherhood, and	-
14	Metis Association of the Northwest Territories;	-
15	Mr. John Bayly and Miss Lesley Lane, for Inuit Tapirisat of Canada,	-
16	Miss <sub>Lesley</sub> Lane, for Inuit Tapirisat of Canada, and The Committee for Original Peoples Entitlement;	The second secon
18	Mr. Ron Veale and	-
19	Mr. Allen Lueck, for The Council for the Yukon Indians;	
20	Mr. Carson Templeton, for Environment Protection	-
21	Board;	-
22	Mr. David H. Searle, Q.C. for Northwest Territories Chamber of Commerce;	
23		-
24	Mr. Murray Sigler and for The Association of Munici- Mr. David Reesor, palities;	
<ul><li>25</li><li>26</li></ul>	Mr. John Ballem, Q.C., for Producer Companies (Imperia Shell & Gulf);	1,
27	Mrs. Joanne MacQuarrie, for Mental Health Association of the Northwest Territor-	-
28	ies.	-

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William J. DEYKLL

- In Chief

- Cross-Examination by Mrs. Macquarrie

- Cross-Examination by Mr. Banier

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Yellowknife, N.W.T.,
August 16, 1976

(PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT)

THE COMMISSIONER: Ladies and

gentlemen, are we all set?

MR. HOLLINGWORTH: Mr.

Commissioner, the second panel in Phase 4 for Foothills
Pipe Lines consists of Mr. John Burrell, Miss Maureen
Jensen, Mr. John Ellwood, Mr. Bill Deyell, Mr. John
Macleod. It should also consist of Mr. Dick Littledale
and Mr. Wally Kosten, both of whom are facing other
duties in Ottawa at the moment, and I apologize for
their absence, sir. I am not sure at this time if
we'll be able to have Mr. Littledale back before you
any time, but all the panel are prepared to speak to
operations and maintenance matters, and I think will
deal with the questions quite adequately.

Mr. Kosten will be back at a date that will be agreed upon between counsel, hopefully today or tomorrow, for cross-examination principally I think with respect to the union contracts which are appended to this evidence.

Mr. Ellwood will read Mr.

Kosten's evidence; and Mr. Deyell will read Mr. Little-dale's evidence.

I think, sir, that the panel with the exception of Mr. Deyell, have appeared before you at this time.

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Burrell, Jensen, Ellwood, MacLeod, <u>Deyell</u> In Chief

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JOHN K. BURRELL,

MAUREEN E. JENSEN,

JOHN R. ELLWOOD,

JOHN B. MACLEOD, resumed:

WILLIAM J. DEYELL, sworn:

DIRECT EXAMINATION BY MR. HOLLINGWORTH:

Q Mr. Deyell, I understand that you're presently a senior vice-president of the Alberta Gas Trunk Line Company Limited.

WITNESS DEYELL: Yes, I am.

Q You're a professional engineer with a degree in civil engineering from the University of Toronto in 1951.

A Yes sir.

Q From 1951 to 1959 you

Were employed with Canadian Bechtel and Dutton-Williams-Mannix, in engineering and construction of the Trans-Mountain Oil Pipeline, Westcoast Transmission systems, the TransCanada Pipeline system, and the Alberta and California Gas Pipeline project.

A Yes sir.

Q That after 1959 you

joined the Alberta Gas Trunk Line Company Limited in engineering and construction, and you have been progressively a chief engineer, manager of operations, vice-president, and presently your position of senior vice-president.

A Yes sir.



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employable -- oh, I'm sorry.

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And that' you're a 0 director of the Alberta Gas Trunk Line Company Limited Valve & Regulator Company.

> Α Yes sir.

And there was an error 0 on the C.V. that was filed, sir. It stated that Mr. Devell was the director of Alberta Gas Chemicals Limited, which he is not.

If I could commence on page 4 of the prepared evidence, Mr. Burrell, what is Foothills overall hiring policy as it relates to northerners? WITNESS BURRELL: Foothills intends to give preferential hiring treatment to all

THE COMMISSIONER: Miss Hutchinson, before we start, will you get me a cup of coffee if there is any left? Sorry, go ahead, Mr. Burrell.

A O.K. Foothills intends to give preferential hiring treatment to all employable northerners. When the qualifications of a northerner and a southerner are equal, preference will be given to the northerner.

MR. HOLLINGWORTH: If the qualifications are not equal, will you be providing training programs to upgrade skill levels?

Α . Yes. Those northerners in this category who seek employment during the construction phase will be encouraged to take advantage of the available training opportunities in those skills which



Burrell, Jensen, Ellwood,
MacLeod, Deyell
In Chief

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will present employment possibilities on a continuing basis in the north. This matter will be dealt with in more detail in evidence presented by this panel on the proposed manpower delivery system.

Those northerners who become

operations and maintenance personnel with our company will be given the opportunity to receive training which will enable them to take advantage of the long-term employment opportunities offered by the pipeline operational phase. This training will not only be directed towards the upgrading of skills, but also assume towards qualifying northerners to/positions of supervisory and managerial responsibilities.

Foothills is not unfamiliar with skilled training programs for northerners. In fact, one of the Foothills sponsoring companies, Alberta Gas Trunk Line Limited, started the Northern Training Program in 1971 which has since evolved into the present Nortran program.



Burrell, Jensen, Ellwood, Deyell, Macleod In Chief

How many northerners

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will Foothills train and employ?

A We presently don't -- we don't presently know. To predict now the number of northerners who will be trained and employed in pipeline related jobs is an impossibility because it is not known how many northerners will take advantage of these opportunities and how many will actually want to.

Q What general policy position does Foothills have with respect to training and employment?

A With respect to training and employment, Foothills has taken the position that one, in any given job category, all employees will be treated equally and each will receive equal benefits and allowances including housing provisions.

Two, all workers will be assigned responsibilities in accordance with their qualifications. The safety of personnel and equipment must at all times take priority.

Three, During the construction phase, northerners will be offered employment at a location as close to their place of residency as it is practical to do so.

Four, we are willing to consider employment rotation and labour pool systems for the construction phase. However, before this could become workable, all parties concerned would have to be in agreement with the system to be adopted.

Five, during the construction



period, Foothills will rely heavily upon the services of contractors and sub-contractors and Foothills will, by contractual obligations, assure itself that these firms operate in compliance with Foothills' policies respecting employment and working conditions.

Six, there is no intention to actively recruit northerners from existing projects but rather we will be addressing ourselves as much as possible to making training and employment opportunities available to those who will be new entrants into the labour force and others who, for a variety of reasons have not fully participated in a wage economy.

Q Throughout your testimony you've used the term"northerner." What is the definition of this term?

"northerner" to mean all members of native groups indigenous to the Northwest Territories and others who are residents of the Northwest Territories on the date the permit is granted for the construction of the proposed pipeline.

Unfortunately there are a number of definitions of northerner now in vogue and I would strongly recommend a universal definition for this term be established in order to avoid any future confusion and uncertainty.

Q Mr. MacLeod, would you please define the scope of your analysis of the population and available labour force of the Northwest Territories?

Burrell, Jensen, Ellwood, Deyell, <u>MacLeod</u> In Chief

WITNESS MacLEOD: I have

endeavoured to assess the effects of the integrated hydrocarbon development comprising the proposed natural gas pipeline, gas plants and gas field development in the areas of impact for which I have been responsible. My analysis has therefore proceeded on the belief that the components of the overall system are inseparable and cannot be validly assessed in isolation. Adoption of this approach has presented some problems in that I am less knowledgeable of producers' intentions than those of the Applicant. However, I believe that the superiority of this analytical framework far outweighs the inherent inconveniences.

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MR. GOUDGE: Mr. MacLeod, could you pull the microphone a little closer to you please sir, I'm having a little trouble hearing you.

A The various impacts of the integrated project have been superimposed upon present conditions which we assume would continue to prevail in the future in the absence of pipeline development. At the same time, I have not explicitly considered the effects of other potential development projects such as a north/south road link completion or an oil pipeline.

MR. HOLLINGWORTH:

O How did you arrive at

your estimate of study area labour availability?

A Because of the limited amount of hard data on the Territories, I used several approaches. In places, such as southern Canada, where data is generally abundant and of good quality, such a forecast would be based upon a projection of the working



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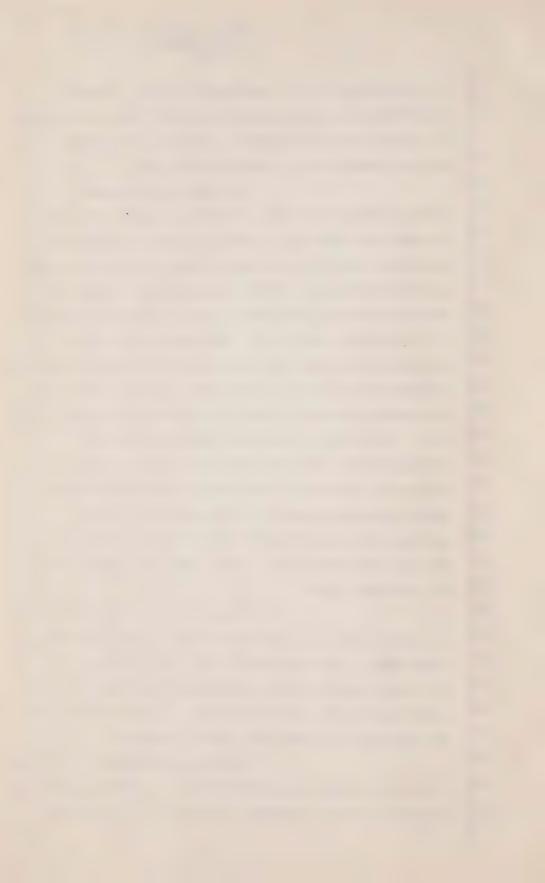
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age population and the participation rate. From the resulting gross labour supply, one would deduct the number of persons actively employed to determine the number who are unemployed but available for work,

The Territorial Manpower survey conducted in 1969, '70 and the census for 1971 provided the basis for a projection of the working age population and also permitted a rough calculation of the participation rate. However, the Manpower survey also clearly documented the erratic work patterns of segments of the northern population. The pronounced seasonal variations and the widespread pattern of another amplew and opportunities strongly suggest that manpower availability and unemployment vary drastically in the course of a year. Furthermore, since the participation rate incorporates an employment duration factor, mainly persons be employed or available for employment least 46 weeks per year, it is possible that the participation rates derived from the 1969, '70 survey data are over-estimated. In any case, the risk of error was certainly high.

Six years in the Territories is a long time and I find it difficult to use such outdated data. Another Manpower survey was conducted in 1975 and I had intended to substitute the results of this recent source for the historic data. Unfortunately, wis has not been very successful up to this point.

Firstly, the information collected last year has been computerized and the learning problems of compilation and processing have yet to be reso ved.



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Secondly, and this is by

far the most crucial, the questionnaire used was designed in such a way that the data collected does not permit determination of conventional participation rights. On the contrary, it merely provides statistics on the number of people employed in the course of a year with little regard to the duration of that employment. Nevertheless, the output that we have received thus far suggests that an increasing proportion of the population is participating in wage employment the 1969 and 1975 figures are not directly comparable. I am also quite sure that the duration of employment is also increasing but I am unable to precisely quantify it to my satisfaction.

With all this in mind, I have pursued a more pragmatic approach. This involved discussing manpower availability with people from Hire North and local employment offices. From these sources evolved an estimate that between 500 and 800 persons were available for employment as of the end of 1974. More precisely, Hire North, which attracts labor from virtually all areas of our study area, could count on having from 500 workers at any one time and a maximum of 800 different people in the course of the year. To these figures, I have added the 62 Nortran trainees residing in the impact region in 1975 in order to obtain my estimate of total (resident) regional labor availability. Unvoluntarily unemployed persons were involved in either Hire North employment or Nortran have not been explicitly considered in my projections and



Burrell, Jensen, Fllwood Deyell, MacLeod In Chief

are not believed to be numerous except in periods of economic slowdown.

attached much more importance to the operations phase rather than to the relatively short construction period. In the former phase, manpower requirements will be primarily for persons who are prepared to work on a sustained basis. For this reason, I have tended to place much more weight on the lower limits of the 562 to 862 range.

Briefly then, I have derived

my regional (that is, study region) manpower availability projections for the operations phase by applying a compound annual growth rate of 4.5% to the end of the 1974 base of 562 workers available for hydrocarron amployment. This rate is .5% above the 4.0% growth rate of the working age population for the period '76 - '81 and this upward adjustment is intended to reflect an increase in participation rates which should result from the increased exposure to wage employment and the greater number of employment opportunities. The resulting projections appear in an improved version of my origina Table 5C-6.3, now numbered Tables VIII and IX in the Appendix.

I think that it is worthwhile to point out that these projections do not include any persons now employed who might leave their current employment in favor of pipeline related work.

Q What other changes have been incorporated in your revised tables in addition



Burrell, Jensen, Ellwood Deyell, MacLeod In Chief

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to adding Nortran trainees to the original labor availability figures?

I initially prepared only one set of tables applicable to the entire corridor. But I subsequently decided to produce separate tables for each sub-region.

I have also modified the method I have used in projecting secondary employment prontion and the criteria used to allocate the limited local work force to a greater number of employment opportunities. I will deal with these changes in due course.

How did you determine the 0 sub-regional labor availability figures?

A I simply prorated the study region total to the sub-regions on the basis of overall population distribution. I readily concede that this allocation procedure is simplistic but a more precise approach would be an almost endless task since I would be constantly adjusting figures for seasonal and memoral economic fluctuations.

In view of the current 0 economic contraction, don't you think that your labor availability figures are low?

Α Yes, they are. However, we do not know when pipeline construction will commence, so we should be more concerned with the availability of labor over the medium term rather than preoccupy ourselves with the short-term fluctuations in economic activity. The base period used for my projections, mainly the end of 1974 or the beginning of 1975,



Burrell, Jensen, Ellwood Deyell, MacLeod In Chief

In the operations phase

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in terms of business conditions which were much slower than in the '70's yet better than at present.

should prove to be an average for the present decade

The current economic contraction is due to two main factors, decreased hydrocarbon activity and a cut-back in government expenditures in real terms. There is every indication that public works will increase in the fiscal '76-77 and will tend to absorb slack particularly in the upper Mackenzie.

Q Do you think that your assessment of the local labor availability applies equally to both the construction and operations phases?

A

most of the employment opportunities will be of a permanent nature and emphasis will be placed upon the continuity of employment. This will be particularly true of most of the secondary jobs, many of which will be created in the public sector. Therefore, since not everyone will be available to work on this basis, I think that the lower limit, that is, 562 rather than 862 plus the growth factor, would be applicable to this

phase. Of course, between now and the commencement

of operations, the participation rate which is based on

46 weeks a year, could rise faster than we have provided

for, such that the entire range of projections would

On the other hand, work in the construction phase will be highly seasonal. Although most of the activity will be concentrated into three



Burrell, Jensen, Ellwood Deyell, MacLeod In Chief

winter months, limited opportunities in other areas, such as logistics, will exist in the summer. The non-permanency of employment in this phase should therefore accommodate a greater number of northern residents.

In this phase, our higher projection which does not appear in the tables would be approached. This would be the 862 people in 1975 plus the 4.5% annual growth factor. It is also conceivable that the already high participation rate of non-native northerners will temporarily increase even further during the construction phase as a result of the prospect of higher earnings.



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Do your labor projections take into consideration female participants in the work force?

A I've given this a lot of thought. A few women are employed by Hire North, particularly as chain saw mechanics and food preparation. There are also a few female training positions within Nortran. To this extent they have been explicitly considered.

Generally whenever the criteria of availability for 46 weeks per year is applied, the participation rate of mature females is very low, although it appears significantly higher in Inuvik and points north than elsewhere in the valley.

This low level of participation cannot be explained in terms of insufficient opportunity. Many young girls graduate from Territorial High Schools with clerical skills, yet few fill the numerous vacancies reported by both private and public employers. These opportunities will be much more plentiful subsequent to pipeline development:

I have discussed this matter on several occasions with Canada Manpower and employment officers and no one has been able to provide projections. Based on this, my frequent contacts with employers, and general observations and experience in the area, it would appear that native females are not particularly inclined to participate in permanent employment at this time. I suppose that one could increase the labor projections



Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

by about 100 persons to provide for additional female participation, but I have not done this because this figure would simply be a guess.

Q Have there been any changes in the hydrocarbon-related employment figures which you presented in the original filing?

A Yes, there have been a few changes .

Firstly, projected field development employment has been adjusted downward in accordance with revised producers' evidence.

Secondly, I have deducted the current level of field development from the projections so as to isolate additional employment created in this sector as a result of the pipeline. This does not, of course, correspond to the total incremental effect of the pipeline proposal. Should the latter not be realized, the current field development would decline and the regional labor availability figures would be increased to the extent of the present involvement of northerners in this type of employment.

Q You previously mentioned that you have changed your method of projecting secondary employment creation. Why did you do this?

A When preparing the initial statement, I was under a very tight time constraint.

In view of the major data deficiencies in the Territories I considered it sufficient to review multipliers calculated for other regions and to adopt some coefficient on the basis of comparison. This approach was expedient and



I had little choice under the circumstances.

Since last April I have had much more time to devote to this matter and the more I thought about it, the more dissatisfied I became with the multiplier of 1.2.

Throughout my analysis, I have considered five residency options which I documen ted in the impact statement. This sensitivity approach poses the problem of precisely defining the multiplier. In fact, there is no such thing as THE multiplier since this type of coefficient can be calculated in many ways, depending upon the intended use. Hence it could be the ratio of secondary to total direct employment, to total resident employment, to total expenditure, or of total employment to direct employment, just to give an idea of the possibilities.

Secondly, the multiplier approach and others such as the basic or primary industry to service industry ratio, do not readily lend themselves to the type of situation that we have in the Territories. Rather, they are much more relevant to stable mature economies.

Thirdly, if a single multiplier must be used, because of data deficiencies, the value of 1.2, that is .2 new secondary jobs for every new direct, is probably a fairly close approximation of the business multiplier -- the effect of higher incomes and employment in the hydrocarbon industry on incomes and employment in the northern private business sector.



Unfortunately, it ignores the employment creation effect in the extensive local public sector and this would be substantial should a large number of outside workers establish residence in the valley.

In this regard, I point out that at the present time there appears to be about 0.45 government jobs in the Mackenzie District for every private job.

Although the study region has been expanded to include Yellowknife, my secondary employment and certain other projections exclude the Territorial capital. Since Yellowknife will be removed from the pipeline corridor, the spinoff effects will consist primarily of increased public service administrative employment which will result from government hiring policy decisions. I have not attempted to forecast these staff increases because unlike the valley communities where government employment is closely related to the provision of relatively tangible services, additional employment positions in the capital are much less likely to be dependent upon relationships between economic variables.

will be stimulated no doubt by the employment of 56 persons in the Foothills' administrative offices and the greater number of civil servants. One could therefore conclude that the multiplier applicable to the entire impact area, including Yellowknife, could be appreciably higher than that applicable only to the valley and the immediate vicinity.



Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

Q Could you briefly summarize the essentials of the approach that you have finally adopted?

A Yes. My new approach is based upon estimating the local content of the effective demand for goods and services in the impact region, in conjunction with the marginal propensities to spend. My analysis therefore hinges upon the region's productive capacity. This method has enabled me to better utilize existing but nevertheless limited data and to take into consideration a greater number of observations pertaining to the economy of the Mackenzie District.

Some of these observations to which I refer include:

- (1) the level of savings is very low;
- (2) correspondingly, in the household sector, consumer expenditures are very high and the emphasis is on current consumption rather than the acquisition of fixed assets;
- (3) in the private business sector, reinvestment of profits is high and at the same time horrowing for the acquisition of fixed assets apparently exceeds the pool of regional savings; and
- (4) due to the absence of significant manufacture, the high level of consumption and investment is roughly equivalent to a high level of imports, which constitutes leakage from the regional economy.

As in the original Table 5C-6.3, secondary employment creation and requirements for manpower



originating outside the impact area are the two crucial and highly interdependent variables. However, in the revised calculations, instead of using just one multiplier, I have applied several coefficients to reflect:

- (1) the effect of increased income and employment of northerners on employment in the local, private and public sectors;
  - (2) the income and employment effect of new residents in the impact region on employment in the local, private and public sectors;
  - (3) the effect of non-resident labor in the study region on employment in the local, private and public sectors; and
  - (4) the effect of increased hydrocarbon activity on employment in the two sectors.

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Upon first glance, one might conclude that this last component, four, involves double counting, such is not the case. Rather, I have observed that when exploration activity increases in the delta, there is always a sudden influx of Alberta based oil field service companies, usually represented by one man. Conceivably, field development could reach such a high level as to entail representation of virtually every oil field service firm listed in the Calgary and Edmonton Yellow Pages. Moreover, this phenomenon is related more to the amount of equipment in the field rather than requirements of field camp workers. general, induced or secondary employment is created by the overall expenditures on a project, not only by its direct employment. It is for this reason that the fourth component has been isolated as a separate factor, despite the difficulties of measurement.

Finally, I have added a constant representing the number of government regulatory personnel which will be located in the corridor.

The hypothesized values of these coefficients and constants accompany the revised tables in the appendix. I must stress that many of these are hypothesized values since hard statistical data which should ideally be used as input is just as deficient now as it was a year ago. Nevertheless, I think that the quality of the output is far superior to that of the first set of tables.

Q What kind of cross checks did you make in order to assess the reasonableness of the



Burrell, Jensen, Ellwood, Deyell, <u>MacLeo</u>d In Chief

By using the data in these

projections?

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3 final tables I

final tables, I calculated several of the more common multipliers and compared their values with those of other regions such as Alaska and James Bay.

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 $\Omega$  How does the value of your multiplier calculated according to your new method compare with your original multiplier of 1.2?

In the first case, the A value of the multiplier was a predetermined exogenous variable and its value was determined -- its valued remained constant whatever the residency option. In my revised approach, the multiplier is essentially endogenous and therefore varies according to the the residency option. However, as an example, the ratio of total incremental employment, including secondary, to total direct, hydrocarbon, employment in a mature period, that is once the pipeline and gas plants are employing the full complement of projected personnel, equals 1.34, 1.37, 1.41, 1.45 and 1.49 for the five respective options, in the intraregional labour mobility case and 1.33, 1.39, 1.45, 1.52 and 1.59 in the labour immobility case, as opposed to the original constant value of 1.2. However, for reasons that I will give later, the higher options are not likely to be achieved.

The data in my tables also permit the calculation of public and private secondary employment creation ratios or multipliers. I would caution that the breakdown between these two sectors is subject to more uncertainty than the total secondary impact since the



evolution of government employment is more difficult to predict, especially in the Northwest Territories.

Moreover, the build-up of secondary employment may not take place according to the schedule suggested in the tables, depending upon the extent of underemployment of the base personnel and facilities.

With respect to the subregional tables, I would add that the apparently high
level of secondary employment creation in the Central and
Upper Mackenzie can be attributed to a great extent, to
the constant number of government pipeline inspectors
which are likely to be stationed in Norman Wells and Fort
Simpson. The 25 positions which have been assumed for
both locations are substantial in relation to the
projected direct hydrocarbon employment and do not reflect
a higher productive capacity than that of Inuvik.

Q How do these new multiplier values compare with similar ratios for Alaska and James Bay?

A I am aware of at least two multipliers which were calculated for Alaska. A value of 1.5 was obtained using the "leakage" approach and a more complex model involving inter-industry relationships produced a value of 1.61 for the first year, with cumulative values for successive periods.

For James Bay, a multiplier of

1.2 was obtained using, I believe, the leakage technique

But, a work of caution is in order



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before comparisons can be made. In all of these cases, the analyses were based primarily on the construction phase while mine deals with the operations period. Nevertheless, as I indicated in the impact statement, I think that the overall spin-off effect in both phases will be similar in terms of opportunities, which may be capitalized upon locally.

It is my understanding that the Alaskan economy is much more mature than that of the Northwest Territories. The private sector is considerably greater than the public sector and includes important and growing manufacturing and wholesale industries which are almost negligible here. Furthermore, the residents of Alaskan labour force is numerically greater and has been able to handle a higher percentage of pipeline related employment that will be possible in the Northwest Territories.

Considering the differences in maturity of the private sectors in Alaska and the N.W.T. one would expect that the multiplier for the Territories would be much lower than that for Alaska. However, the spread is only about 0.1 and would be wider were it not for the very large public sector in the Northwest Territories.

The James Bay case is the opposite of that of Alaska and similar to the Territories with the important difference that government employment in the area is proportionately very much less. The northern part of the region which constitutes most of the land mass, is very sparsely inhabited, even by our standards.



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The local work force is also numerically limited. The southern part of the area resembles a concentrated Mackenzie Valley in terms of availability of business services.



Q Why have you not made any secondary employment projections for the construction phase?

A There are two main reasons for not doing this.

Firstly, the presumably high levels of secondary employment in the earlier phase would be relatively short-lived.

Secondly, the capacity of the northern work force and business community to benefit from induced economic effects may not differ substantially from one phase to the other.

Q Can you explain in terms of your revised projection technique, whether or not the multiplier effects will differ substantially between the construction and operations period?

A In both phases, secondary employment will be created primarily by an increase in the effective demand of:

- (1) established northerners who were previously unemployed and who obtain pipeline related employment;
- (2) established northerners who were previously employed but who will benefit from an increase in salary, mainly as the result of overtime, in excess of increases in the cost of living:
- (3) new resident workers; and
- (4) non-resident workers, that is commuters from outside the impact area.

Although employment and entrepreneurial opportunities will be far more numerous in



the construction period, the capacity of the northern work force to accept these opportunities may not be significantly greater than in the operations and maintenance phase.

In the construction phase, the seasonal nature of the work will favor the participation of a greater number of northerners, probably our higher estimate which is in the 800 range. However, this figure refers to the number of participants in the course of a year and is not necessarily synonymous with the number of man-years of employment that will be accepted during the year.

Local business capacity will also expand during the construction phase but hopefully not to levels which cannot be sustained in the subsequent period.

If we relate these relatively similar capacities to profit from the opportunities created in the two phases and relate them to the corresponding direct hydrocarbon employment figures, the ratio, which is the multiplier, will be lower in the construction phase. The opportunities of the construction period which northerners would not be able to handle would then be assumed by outside workers and firms.

The multiplier applicable to construction would be higher if the outside workers and firms to which I have just referred establish residence in the impact area for the duration of the construction



activity. However, this would be inconsistent with the non-stationary nature of pipe-laying work and the policy of the applicant with respect to access of construction personnel to the valley communities.

The crucial question is not the value of the multiplier but the number of opportunities created in relation to the capacity of northerners to capitalize on them. With reference to the construction period, a multiplier of 1.2 or less may be sufficient to occupy all interested northerners. An attempt to retain a greater proportion of the total spinoff effects in the north might only be successful by incurring disproportionate social costs.

Q The Human Resources

Planning Institute of Seattle, Washington, conducted an analysis of the induced economic effects of the Trans
Alaska Pipeline. It is suggested that the multiplier effect is cumulative over time. Is this consistent with your conclusions regarding the Mackenzie Valley?

references to this study but have not seen the study itself. I would assume that the rationale is that many construction personnel are expected to establish residence in Alaska once construction is completed, and that these new residents would contribute to an expanding economic base capable of supporting additional industry. Otherwise, I fail to understand how 1,000 persons employed in the pipeline construction would create 610 secondary jobs in year 1, and 1,780 by year 8. These figures still appear high but I suppose that this type

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of outcome is conceivable in an economy which has attained a certain degree of maturity.

I doubt whether this type of lagged effect will be very significant in the Territories. Because of the dominance of the government sector, there have been substantial permanent employment opportunities, many of which have been taken by southerners.

Nevertheless, most of these outsiders continue to be employed on the basis of one or two year contracts and promptly leave at the end of this period. This pattern is also followed by private employees, but much less by employers, and I cannot envisage any significant change over the time span presently under consideration.

I think that prime prerequisites for substantial cumulative multiplier effects, for lack of a better term, would include the provision of amenities condusive to the retention of outsiders in the north and the emergence of new productive (or basic) industries. As for the former, this does not necessarily have to involve the transformation of valley communities into comparable southern centres.

With reference to the second prerequisite, I cannot envisage the creation of any new significant basic industry in the foreseeable future anywhere in the study region, with the notable exception of the Upper Mackenzie where economic natural gas could probably justify construction of one or more kiln plants and greatly enhance the prospects of the lumber and related industries. This could undoubtedly



1 create a chain reaction. Over the longer term there 2 could be numerous developments just about anywhere in the 3 vallev. 4 Q Has your new method of 5 projecting secondary employment had any effect on your 6 estimate of manpower requirements? 7 THE COMMISSIONER: I don't 8 understand the last sentence. 9 Α Developments which could 10 take place anywhere in the valley? 11 Q Well, I suppose in the 12 sense that anything could happen, could developments 13 occur anywhere in the valley based on the --14 Α I was thinking there of 15 mining developments. 16 Oh, unrelated -- unrelated 17 to natural gas pipelines or anything else. 18 A Right. 19 THE COMMISSIONER: O.K., fine. 20 MR. HOLLINGWORTH: Q Has your 21 new method of projecting secondary employmen thad any 22 effect on your estimate of manpower requirements origin-23 ating outside the impact region? 24 25 26 27 28

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How have you allocated the

A Yes. The revised secondary employment projections are almost double those which I had originally prepared while, at the same time, my estimate of regional manpower availability has only been increased by the number of Nortran trainees. The overall effect will therefore be a greater need for outside workers, all other variables being held constant.

various kinds of employment to established northern residents, new residents and commuters?

A In my original tables
5C-6.3 and 5C-9.2, I initially assigned pipeline and
gas plant operations employment to established northerners to the maximum possible extent, considering the skill
levels of these people in relation to the skill requirements of these positions. Remaining available northerners were assigned to secondary and field development
employment, in that order of priority.

The rationale for this allocation was that pipeline and gas plant operations positions would be the most prestigious and therefore most desireable. As for the two remaining categories of employment, I felt that secondary employment, most of which would be based in the communities, would carry a higher social value because it would allow the employee to remain with his family.

In the revised tables, pipeline and gas plant positions have been allocated in the same way as previously. However, adjustments were required in the assignment of secondary and field



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development to avoid unrealistic results. Without modification of the allocation cirteria, all available northerners remaining unemployed after the intial assignment of operations employment, would be holding secondary jobs, with none involved in field development. Such an occurrence would not be consistent with the current and projected Nortran participation of northerners in field development training positions.

Secondly, despite what I have said about the greater social value of employment within the community, it must be recognized that some natives prefer work in camps well removed from their settlements. The conditions inherent in this type of employment enable them to accumulate greater income through inaccessibility to outlets for spending their earnings and through avoidance of pressures at the settlement level to abruptly and prematurely terminate employment.

In order to reflect these realities, I have allocated secondary and field development employment on the basis of the availability of local manpower, their skill levels and the relative availability of employment opportunities in these two categories.

Q How have you determined

these skill levels?

A In the case of hydrocarbon related employment, I have related the skills required of these positions to the number of Nortran trainees

and to assessments of skill which the unemployed segment

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of the labor force has acquired from other sources. As far as secondary employment is concerned, I have relied upon opinions expressed by employment officers and people associated with vocational training.

The resulting skill coefficients are aggregates and state, for example the proportion of jobs in each category which could be held by resident northerners. Moreover, these coefficients are not fixed but increase over time. These skill factors have been admittedly difficult to assess and I have had to make frequent changes in the course of my study. The hypothetical values which were finally adopted are indicated in the notes accompanying the revised tables.

These coefficients may appear low, but actually reflect some optimism on my part.

However, it must be remembered that, with the exception of the Nortran trainees, they pertain mainly to unemployed persons with a limited employment history.

Q Are your projections of manpower requirements originating outside the study region simply the difference between the total number of jobs and the available local work force?

A Yes, but subject to

qualifications.

Firstly, it must be recognized that given the existing skill levels of the available local work force, certain positions will have to be filled by highly trained personnel originating outside the impact region. Hopefully, local people will be able to assume an increasing proportion of these jobs



over a time as a result of a gradual upgrading of skills.

Secondly, the mobility of the local labor force will have a bearing upon the final outcome. In my original table 5C-9.2, I have considered the entire corridor without regard to the supply and demand conditions specific to each of these sub-regions. At the sub-regional level, it is evident that the severest shortage of manpower will occur in the delta while, at the same time, pipeline operations and maintenence and will not create enough jobs in the upper Mackenzie to employ the relatively numerous work force living in that area. This is not surprising since the bulk of hydrocarbon employment will be situated in the delta where the available work force is believed to be less than in the upper Mackenzie and vicinity.

Over the longer run, the labor surplus in the upper Mackenzie could very well be absorbed by the creation and expansion of basic industries which would become economically feasible with relatively inexpensive natural gas. However, this occurrence is not reflected in my projections.

In the shorter term, most of this surplus could successfully obtain employment elsewhere in the valley, mainly in the delta. In some cases, this could be achieved by commuting; in others, relocation would be necessary.

These two possible outcomes referred to as the intraregional labor mobility and immobility cases, are portrayed in the revised tables

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VIII and IX respectively. The consequences of these two cases are significantly different and highlight the implications of the participation of mortherners in northern development.

You will note that, for convenience, my original table 5C-9.2 has now been fused with tables V to X.

Q Are you suggesting that all requirements for manpower in excess of the available local work force will originate from outside the Territories?

A No, not at all. In my analysis, I consider the impact region on one hard and the rest of the world on the other. One could expand the impact region to encompass a greater portion of the Northwest Territories but this would not serve much purpose because the further one goes from the immediate corridor, the lesser will be the impact. Even at present, we have defined the impact region as including areas which are far removed from the main line, notably Hay River, Fort Providence, Rae-Edzo and Yellowknife.

Hopefully, some of the projected manpower shortfall will be met by residents of other parts of the north. However, there is little quantitative difference in the impact on the corridor region between a worker originating from a northern community situated outside the corridor and one from the south. Both will contribute to the population increase of the receiving community and will exert similar demand on public and private services.

Qualitatively, of course, the

differences will be considerable and would affect
major sociological considerations such as the ethnic
distribution of the population. The policy of the
applicant with respect to the priority hiring of

where, will tend to alleviate potential disruptions of

northerners be they resident of the corridor or else-

this nature.



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Q This leads us to demographic projections. How did you arrive at your estimates of natural population increases, that is in the case where there is no development?

this question I would like to emphasize that the sole purpose of making such projections is to have a base upon which the impact of some new development, in this case the pipeline, can be superimposed. The probability that these projections will conform to reality diminishes rapidly over time and approaches zero, because over the time span under consideration some kind of development will likely occur. And because of the very limited scale of the economic and demographic base of the Mackenzie District, this impact will not go by unnoticed.

As you are probably well aware, there are several sets of population projections presently in circulation. Most of the serious estimates are based on the 1971 census while another is the product of field work undertaken by Gemini North Ltd. before census data was available. Since population estimates in the Territories are subject to a higher degree of error than elsewhere in Canada, and since specialists have spent much more time on the subject, I would have had to devote excessive time and effort, in relation to the limited potential returns, just to attempt to improve upon the present state of knowledge. With this in mind, and considering that we are concerned primarily with the potential demographic impact resulting from the



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proposed hydrocarbon development, I have adopted an expedient and highly pragmatic approach.

Basically, this involved adopting the 1971 census data for all communities with the exception of Hay River, Kakisa Lake and Trout Lake, in which cases Gemini North Ltd. field data seem to conform more closely to my impression and that of the social consultant retained by the applicant. I also adjusted 1971 census data for Inuvik and Fort Simpson by 5 and 10% respectively, to take into account the presence of the quasi-permanent transient population residing in hotels and hostels. Finally, Gemini North descending natural growth rates were applied to the selected 1971 base data. The objective of this approach was to find the most accurate actual figures for 1971 to which could be applied growth rates that would produce estimates for 1975 which best conform to my impressions of the current population. These impressions were based not only on personal observations but reflect informed opinions of mayors, settlement secretaries, and the social consultant retained by the applicant.

These projections could be revised periodically using the same method, but I suggest that what I said earlier about manpower availability projections and fluctuations in general economic activity applies equally well here. Nevertheless, I note that the population of Inuvik, Fort Simpson, and perhaps Hay River, have declined in absolute terms since my population projections were made in early 1975.



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Q How did you determine the population increases resulting from the proposed pipeline and related developments?

multiple of 2.5 to the projected number of workers originating from outside the impact area, who elect to establish residence in this region. Such workers include all outsiders who would fill pipeline operations, maintenance and management positions in the north secondary jobs, and varying proportions of outsiders holding field development jobs. With respect to the latter, I have considered five possibilities according to which 0%, 25%, 50%, 75% and 100% of these workers would choose to reside in the impact region. In addition, a few gas plant operators might live in the delta, although producing companies suggest that most of their personnel will be commuters who will work on a rotational basis.

The application of the multiple of 2.5 pertains to the assumption that each new resident worker during the operations phase will be accompanied by an average of 1.5 dependents. This figure was obtained from the Gemini North Ltd. study. The population impact appears in the new Table XII, and these figures have been superimposed upon Table X to obtain Table XI.

Q Consideration of these five residency options results in an equal number of projections. Do you have any idea which of these possible levels will prove to be the most realistic?

A I tend to put more weight



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In Chief

on the lower projections with a gradual increase over time. More precisely, I think that the average option, that is 0.5, would be the upper limit and probably would not likely be attained before the sixth year of substantially increased field development activity. Even this could be on the high side.

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Since roughly two-thirds of the projected total of hydrocarbon employment will be in field development, the choice of residency of the outsiders filling these positions is crucial. Up to the present, the labor shortage in the field development category has been met almost exclusively by commuters from the south. In the future, this type of employment will still be located in camps and is not likely to be any closer to communities than it is at the present. For this and other reasons, it is most unlikely that it will ever be possible to commute daily from a northern community to a work site in the field. This being the case, I do not think that there are sufficient grounds to believe that all of a sudden these commuters will massively take up residence in the impact region. The only justification for a change in the existing residency pattern would be greatly improved prospects of continuity of employment attributable to the higher level of projected activity in the field. However, I would imagine that this factor would apply only, to a minority of the southern commuters, since most appear to be of a temperament which is more compatible with intermittent rather than sustained employment.

I know that some very high

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projections have been made by others, and as far as I know, they are based on the realization of higher residency options. Should they follow from such hypothesis, I would say that they are unrealistic and alarmist.

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Q Are you suggesting that your population projections with development will ultimately conform to actual population figures which will be attained in the future?

No. I have been asked Α to assess the impact of one particular development project and its inter-related components, and my assessment has been limited accordingly. Other developments will undoubtedly take place, the impact of which will be additive. Over the medium term, completion of the Dempster Highway is virtually inevitable, and there is every indication that it will have greater impact, particularly social, but also economic, than the proposed pipeline. Some day, the Mackenzie Highway will reach the Arctic Ocean, an oil pipeline will eventually be considered, mineral developments could take place at several possible locations in the valley and lumber related industries could vastly expand the Upper Mackenzie. None of these possible developments are reflected in my projections and, for this reason, my population projection should tend to be low over the longer term.

Q How have you allocated the overall projected population increase to the various communities?



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assumption that all of the manpower originating outside the impact region which establishes residence would reside in the largest community closest to the place of work. In my original projections, I assumed that these new residents originating from other areas of the north —— I assume that some new residents originating from other areas of the impact region would settle in valley settlements, particularly in the delta. This assumption is no longer reflected in my figures because of the highly subjective nature of the estimate. Nevertheless, I still believe in the validity of this hypothesis.

In general then, most of the population increase will be concentrated in Inuvik,
Norman Wells, and Fort Simpson, The demographic growth of Yellowknife will also be stimulated.



Have you projected any

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Firstly, there is a good possibility that the participation rate of natives will increase. Should this occur and, in addition, be it accompanied by a more rapid improvement of skill levels

than we have projected, requirements for manpower originating

to the commencement of pipeline operations?

A No, I have not. At the present time, and it's not uncommon for people to temporarily leave their home settlement of say, Aklavik

population movements within the sub-regions subsequent

Fort Simpson. I suspect that this pattern will continue, but, over the longer term, I think it would be reasonable

or Jean Marie River, to work for a while in Inuvik or

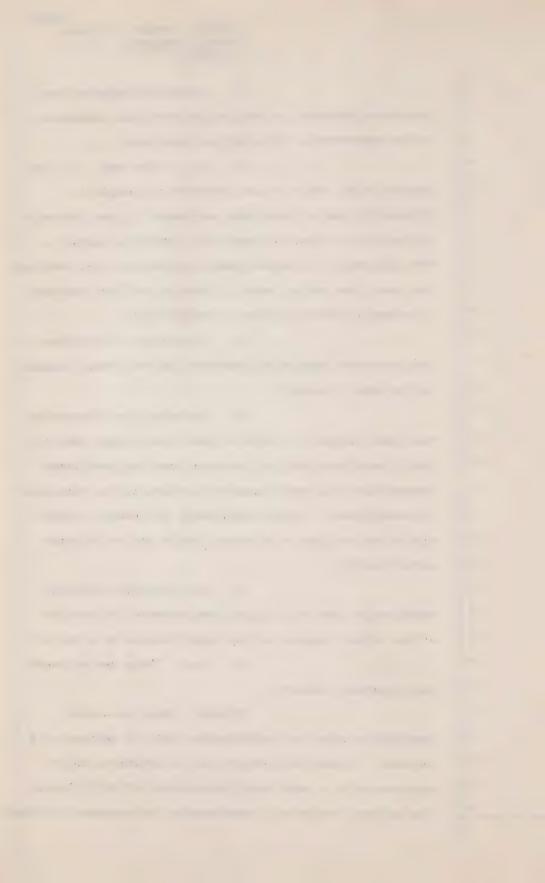
to expect a greater degree of urbanization.

Q What effect do you see of the projected population increases on the ethnic balance in the impact region?

A Assuming that non-native outsiders choose to reside in the three larger centers that I mentioned earlier, one can conclude that these communities will experience an increase in the percentage of non-natives. On the other hand, the ethnic balance within the smaller settlements should not be affected significantly.

Q Are there any factors which would tend to minimize the potential disruption of the ethnic balance of the impact region as a whole?

A Yes. There are at least



In Chief 1 outside the impact area will be correspondingly reduced. 2 Secondly, it is generally 3 believed that many native northerners have left the north 4 over the years because of inadequate employment opportunitie 5 This observation, therefore, raises the possibility that 6 some of these former residents will return as a result 7 of the creation of new opportunities due to hydrocarbon 8 development. 9 THE COMMISSIONER: Excuse me, 10 Mr. MacLeod, that general belief is one that no one has 11 expressed here before. On what do you base that state-12 ment? Is it just something generally held or is it the 13 product of any study? 14 A Well, there are personal 15 cases that I can think of. I think a couple of former 16 northerners addressed your Inquiry in the south, Dr. 17 Carpenter from Sachs was one. So, I didn't conduct any 18 study on this. 19 Yes, well, he's the only 20 one that I can think of and --21 Well, every time I go 22 to Edmonton and Calgary I run into them. 23 0 Oh, I see. Okay, carry 24 on. 25 MR. HOLLINGWORTH: Your popu-26 27 28

lation projections are restricted to the operations phase. Do you not anticipate any demographic impact during the construction period?

A Yes, I do, but I attach much more importance to the operations phase because the

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principle communities.

impact of this latter period will be a far greater determinant to future requirements for a wide range of public and private services ranging from health care to housing. This is one fo the prime reasons for which population estimates are made.

In view of the applicant's intended policy of restricting the movements of construction workers to work sites, the population impact is likely to be far less than in the operations phase. However, this does not mean that it will be negligible.

Firstly, considerable secondary employment will be created during the construction phase and much of this will be handled by local firms which are based in the communities. This will tend to increase the local population to the extent that all these manpower requirements cannot be met locally. But, at the same time, it is expected that these new employees will, for the most part, be performing their functions out of town in the vicinity of the pipeline right-of-way, andd in many cases, reside in camps at the work sites.

Secondly, there is another class of firms, both local and originating elsewhere, which will increase their local personnel within the communities. A good case in point is the air charter industry. These firms will still have to base their equipment and personnel at their licenced base.

Other logistics personnel, although not numerous, will also be located in the three

Thirdly, the oil field service

company representatives, to whome we referred previously will not wait until gas starts to flow before returning to the north, probably in greater numbers than before.

However, I would like to point out that many of these people were here during the boom period of the early 1970's and should therefore be reflected in the 1971 population figures which have provided the basis for my projections. Many will return to occupy residences vacated over the last few months.

The greatest prospect for new population impact would come from the oil field service category. Since these people have been accounted for in projections for later years, their early arrival will merely have the effect of advancing a portion of the projected increases ahead two or three years.

In view of the Alaskan experience, transients from the south would be the most numerous and potentially the most disruptive element of demographic and other impact. Just as Fairbanks was the drawing point in Alaska, one might expect Inuvik to be the major jumping off point in the Territories; however, the similarities end there.

First of all, there is no road link to the south at present and completion of an all weather highway is unlikely before pipeline construction is terminated. This means that Fort Simpson will be the furthest point north accessible by road.

Secondly, in Inuvik and the settlements in particular, and the north in general, most housing is directly under public control. Hotel



capacity is geared to present demand and is therefore limited.

manpower estimates for the following activities which will be dealt with later, the District Headquarters staff,

These two major obstacles
the necessity of at least a one way plane fair worth
about \$200.00, the extremely limited availability of
accommodation at any price and the probability that
southerners will go through hiring halls located in the
south should help avoid the creation of a transient
problem of Alaskan proportions. This does not mean that
few will come; rather, those who come will not be able to
remain long. Consequently, the demographic impact
should not be great although this may not necessarily be
true of other sensitive areas, particularly those of a
social nature.

Q Mr. Ellwood, will you outline the construction manpower requirements for the Foothills project?

which is attached to this evidence, shows the total manpower required for the project. This figure supersedes
Figure 3D-1.2 in the original Foothills' application.
The manpower requirements shown in Figure 1 include personnel required for the following construction activities.
Surveying, support facility construction, logistics,
pipeline construction, compressor, station construction,
catering and construction management.

Figure 1 does not include

Enterprise and Axe Point staging sites, construction of community laterals.

As can be seen from this graph, the peak manpower requirements build up at the following approximate rates:

1050 in the first year,

1500 in the second year,

3250 in the third year,

6000 in the fourth year,

4500 in the fifth year,

250 in the sixth year,

2100 in the seventh year and

1700 in the eigth and last year of the construction programme.

During years two to five

inclusive, these peak requirements occur during the three and one half month winter season and the manpower required during the summer season varies between 40 percent and 60 percent of the peak for that year.



Have you made any

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estimates of the percentage breakdown of the work force according to skill levels?

A Yes. Figure II, which is

attached to this evidence, shows the relative composition of the work force according to skill level. The skill classification system which we have used in preparing this graph is the same as the one suggested on page 70 of the volume entitled "Regional Impact of a Northern Gas Pipeline", Volume I -- Summary published by the Task Force on Northern Oil Development as Report No. 73-28.

From Figure II, it can be seen that the number of workers required in skill Category IV averages approximately 23% of the total work force and peaks in year four with approximately 1320 workers required. Similarly, Skill Category III averages approximately 13% of the work force and peaks at approximately 840 workers in the year four; Skill Category II average 43% of the work force and peaks at approximately 2280 in the year four and Skill Category I averages approximately 21% peaking at 1560 in year four.

Q How many of the employment opportunities which you have just described do not require previous pipeline construction experience?

A By definition, all of the positions in Skill Category I require previous pipeline construction experience and therefore, none of these positions will be available to persons who are not part

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of the pipeline construction industry at the time the project gets under way. However, many of these positions required relatively short periods of exposure to pipeline construction and those persons who are skilled construction workers will be able to move into these positions as the project progresses.

The percentages of positions in Skill Category II which do not require previous pipeline experience is limited by safety, productivity and training considerations. Our judgment is that something in the order of 5 to 10% of these positions could be filled by "non-experienced" personnel without jeopardizing safety or unduly restricting the ability of the crew to function.

Virtually f of the positions in Skill Categories III and IV can be filled by persons without prior pipeline experience.

Q Earlier you mentioned three areas of construction activity which are not included in these estimates. Would you deal with them now?

A Our construction management

plan presently calls for:

- 1. offices to be located in Yellowknife, Fort Simpson,
  Norman Wells and Inuvik. Each of these offices will
  have 25 to 35 personnel located in them. It is anticipated that such personnel will be directly by Foothills.
- 2. The Enterprise and and Axe Point staging sites require from a low of approximately 50 personnel each rising to approximately 140 personnel each during the

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peak season. These personnel will be housed in self-contained camps at or near the staging sites.

The construction of the community gas supply laterals will be by "small inch" contractors. construction of the Yellowknife/Pine Point lateral system will require two spreads with 250 to 300 men These crews will be housed in self-contained each. camps. As for the laterals to the Mackenzie Valley communities, these could be constructed by the same crews which install the community gas distribution systems.

In your opinion(and I opinion) realize it's Mr. Kosten's/ will this project be under union jurisdiction?

Α The question of whether the project is under union jurisdiction revolves around whether the pipeline contractors that are engaged to execute the construction are signatory to collective agreements with the four trade unions that exercise jurisdiction over mainline pipeline projects.

While there may be individual exceptions, most of the major pipeline contractors that are capable of constructing what is referred to as a "big inch" pipeline carry out the work in accordance with the four trade union collective agreements.

The collective bargaining process that has been established in the Canadian pipeline construction industry is that the Pipeline Contractor's Association of Canada acting as the agent for its member contractors, on their behalf from time

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to time negotiates agreements with the trade unions. The members of the Association have agreed to be bound by these agreements even though individually they may not be signatory to them.

The present union agreements cover and the unions claim jurisdiction over work that is proposed to be performed in the Northwest Territories. As these agreements are legally binding, the four trade unions in fact do have jurisdiction on the project proposed by Foothills in the Northwest Territories if the work is performed by "union" contractors.

Inasmuch as Foothills must ensure that the contractors that it will engage for the construction of the project are capable in both resources and financial capability to ensure completion of the project, and will also be required to demonstrate previous experience of constructing large diameter pipelines, we cannot visualize a contractor attempting to operate non-union on the mainline portion of our project.

Further, in order to preclude the possibility of a strike on the project during the construction period, Foothills would request the Association to negotiate a Project Agreement for its project with the unions that would ensure as far as possible, labor peace on the project during the life of the construction.

As the negotiating process to develop such agreements is a complex and specialized

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function and has evolved over the years, it should be conducted by the Pipeline Contractor's Association which has a competence in this negotiating process and which can maintain practices that have been developed or is in the best position to develop and incorporate new practices if they are required, such as the incorporation of the northern natives into the work force.

Q What are the current procedures for hiring on pipeline projects?

A While each contractor may vary the way in which he implements the procedure, each of the agreements has a section that describes the "Hiring Prodedure" that will be followed for the members of that union. In this regard, copies of the agreements between the Contractor's Association and the four trade unions are filed as Exhibits.

It should be pointed out that these agreements cover only the mainline pipeline construction. The construction of compressor stations is covered by union agreements with the appropriate Building Trades' Council.

The majority of the construction forces on the project would come under the mainline pipeline agreements.

Prior to the commencement of the project, the contractor and the various union business agents hold a "pre-job conference" to discuss the details of how the contractor intends to proceed with the work, such as: the number of working days per



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and so forth.

The same agreements previously

referred to also contain a section on "Working Rules" which must be adhered to by the contractor.

week, the normal hoursper working day, the location of

the camp or warehouse, frequency of payment of wages



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The other factor involved, of course, is the aspect of having qualified personnel

Q How do you foresee the implementation of the agreements to your project, and the incorporation of the northern natives into the work force?

A There is no simple answer to this situation. As the project will be under union jurisdiction, then provision must be made in the project agreement to provide a mechanism for the provision of opportunity on an equal basis without discrimination for those people that want to participate in the project on the one hand, and balance this with the need tohave sufficient personnel available with appropriate skill levels to get the job done.

The mechanism by which to achieve this result must be established jointly by all the parties that will be involved through negotiation and cannot be established unilaterally. In our opinion, the matter should be referred to the Joint Canadian Pipeline Advisory Council of the Pipeline Contractors' Association and the unions with a request that they meet with the appropriate representatives of northern residents and come to an agreement to ensure the incorporation of northerners.

If some such procedure is not instigated, and conditions are set down unilaterally, the potential might exist for labor problems when any attempt to implement these procedures is made at the commencement of construction.



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available where a degree of skill is required from the standpoint of acceptable productivity and safety. To this extent, training programs can be established in order to provide some of the basic training for those who wish to participate, but have little or no previous experience. This could possibly be accomplished in conjunction with the screening procedure discussed by others on this panel.

Q All right. What areas of influence will Foothills have on ensuring that northerners and particularly natives get jobs?

A We feel that the area of influence where Foothills can be most effective is to attempt to instigate the negotiation -- I seem to have run out of voice here.

MR. HOLLINGWORTH: It's nearly 12:30, sir, perhaps we could adjourn.

THE COMMISSIONER: Let's adjourn until two then, and see how Mr. Ellwood feels then. O.K.

(QUALIFICATIONS & EVIDENCE OF BURRELL, JENSEN, ELLWOOD, MACLEOD & DEYELL MARKED EXHIBIT 684)

(PROCEEDINGS ADJOURNED TO 2 P.M.)

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## (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT)

1 MR. HOLLINGWORTH: Mr. Commissioner 3 before I commence the questioning again, I might say that 4 as you know, Mr. Blair, the President of Foothills, intends 5 to attend the Colville Lake hearing which is scheduled 6 for this Saturday, the 21st. He will be in Yellowknife on Friday, and would like, if it's possible and I've 7 8 checked with some of the counsel, to make a speech at that 9 time, make a statement to the Inquiry and I can distribute 10 the text of that as soon as possible upon receiving 11 the approval. 12 THE COMMISSIONER: Well, I 13 see no difficulty and I don't anticipate any, but if 14 any member of -- if anyone has an -- I mean counsel has 15 any objection, they might tell Mr. Goudge. We'll assume 16 that -- you can assume that we'll be happy to hear from 17 Mr. Blair at whatever time is convenient to him on Friday. 18 MR. HOLLINGWORTH: Fine, and 19 he would be available for cross-examinination in the normal 20 course, I take it. 21 MR. STEEVES: It's a speech, 22 will any questions be allowed? 23 THE COMMISSIONER: Well, 24 that was just indicated. I think it's a statement, 25 there was a slip of the tongue there.

MR. GOUDGE: It may be,

with luck it will be a question and answer MR. HOLLINGWORTH: Mr. Commissioner, when we left

off, Mr. Ellwood was in the middle of answering question 59 and perhaps I could go back and start with that question



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Mr. Ellwood, what areas of

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influence will Foothills have on ensuring that northerners and particularly natives get jobs?

WITNESS FLLWOOD: We feel that the area of influence whereby Foothills can be most effective is to attempt to instigate the negotiation of a Project Agreement between the various parties as indicated previously with the request that the provision for the northern natives be incorporated and built into the Project Agreement or agreements.

Foothills would be prepared to participate in any such negotiations as an interested party or to express our views as to the adequacy of any such provisions that may be evolved. We recognize that the historic negotiating process must be maintained in order to maintain the continuity of good labour relations in the industry.

Q What are your views on training or upgrading programmes, either in existence now or new programmes to help northerners advance to higher skilled jobs?

A The present training programmes that have been developed jointly by the contractor's association and the unions in conjunction with Canada Manpower have been adequate to help the industry keep up with labour requirements. The present programmes have been based on the concept that individuals that have had some exposure to the industry are provided with the opportunity to upgrade their basic skill. For



such

example, programmes have been established which have provided to unskilled people some understanding of pipeline construction practices so that they could then proceed with further upgrading through on the job training. For the individuals that are interested in progressing, on the job training is the most effective means of upgrading skills.

There are, however, opportunities in a construction project that require little or no previous experience and the training is actually acquired on the job. This training is usually obtained by association as a helper to a skilled tradesman. To a large degree, it is anticipated that for a significant portion of the northerners, this course may prove the most practical.

stated that there will be many job opportunities
available to northerners during both the construction and
operational phases of the pipeline and its associated
development. Since most northerners will be unfamiliar
with the type of work, the working conditions and procedures which will prevail, how are they going to be able
to take advantage of these opportunities, should they
desire to do so?

this would best be accomplished through a simple, efficient northern manpower delivery system.

Q And how would you see a system structured?

A With all the various parties

WITNESS BURRELL: In my opinion,



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which could be involved and the number of uncertainties which presently exist, such as what conditions will be contained in the permits, what roles each of the parties might eventually play in such a system, to name a few, it is impossible to set out any detailed delivery system at this time. We have, however, developed the framework for a possible northern manpower delivery system, which I believe is worthwhile presenting, because it does indicate generally the steps which might be followed.

In going through this exercise, it became obvious that if such a system is going to be functional, all parties involved must be in agreement with the objectives, structure and operation of the system, and also must be prepared to assume their share of responsibility. However, to make such a system workable, it is our opinion that one group must take the responsibility for its overall operation. Such a system, too, must be compatible with the contents of the project agreements which are developed for this northern pipeline project.

In our opinion, a delivery system should become operational as quickly as possible following the issue of those permits necessary to construct the pipeline so that northerners can be in a position to take advantage of the job opportunities which the construction phase will offer.

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Burrell, Jensen, Ellwood Deyell, MacLeod In Chief

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1	Q What overall objectives
2	did you attempt to satisfy when formulating this
3	northern manpower delivery system framework?
4	A 1. The system should
5	be designed for the impact region, but with the
6	capability to provide information outside the impact
7	area if requested.
8	2. The system should be designed to deliver northern
9	manpower to the total project, i.e., pipeline and
7	related activities. This would avoid unnecessary
1	duplication and competition for the northern worker.
. 2	3. The system should as much as possible, direct
3	northerners into the vocation for which they are best
4	suited.
5	4. The system should prepare the northerners for the
6	working conditions which they will encounter.
7	5. As much of the delivery system functions as
8	practical should be carried out in the communities, thus
9	allowing the northerner to remain in his home community
0	as long as possible.
1	6. The system should utilize services available from
2	the existing sources as much as possible.
3	Q What functions do you
4	believe should be included in any northern manpower
5	system?
5	A The flow chart attached
7	as Table III of the Appendix shows the framework of a
3 :	possible northern manpower delivery system.
9	Q. Would you please describe
0 1	what is intended for the activities which are shown?



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- A The initial activity of the delivery system is to provide advance information. The objective here is to familiarize northerners with the employment opportunities which are available.
- 1. It is suggested this might be accomplished through employment offices located in each of the communities in the impact reion. Information would be provided on request to residents outside the impact region. Information and counselling could be provided on such topics
  - (a) Function of a pipeline and associated activities.
  - (b) Number of jobs available.
  - (c) Job descriptions including qualification level, length of employment, rates of pay and future prospects
  - (d) Upgrading and training programs available, and,
  - (e) An overview of the total manpower delivery system including data on:
    - (i) Jobs conditions,
    - (ii) Camp life,
    - (iii) Union procedures and regulations and,
      - (iv) Common industry practices.
- 2. From the Advanced Information should come the indication by northerners of any interest in employment on the project, at which time, education and job history of each applicant could be obtained.
- 3. The next step in the process is the initial screening. At this point, based upon interest, education and experience, northerners are directed into one of



following suggested categories.

- (a) Construction -- pipeline, building trades or services, or,
  - (b) Administrative and clerical, or,
- (c) Operations and Maintenance.

This function could also be accomplished through the community employment offices.

Since government already has departments providing services similar to those described and in fact have offices located in a number of the northern communities, it is my opinion that in order to avoid duplication of the services it would be appropriate for government to provide these functions.

4. For those northerners entering one of the construction phase sub-categories, the selection process would be the next suggested step. At this stage, the experience, education and interests of the candidates are again evaluated and each candidate is further channelled into the craft for which he appears to be best suited. Selection would be made by a panel with representation from the interested parties, i.e. representation from the government, owner, contractors, unions, and local organizations. The selection panel representing pipeline construction for example, would determine if the candidate was job ready an on-the-job trainee, a special trainee or an apprecticeship trainee.

The definition of job ready in this situation would mean that the candidate's job



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history shows he has the skills such that he can go directly to the job as a journeyman.

An on-the-job trainee would mean the candidate's job history shows he has the basic skills but requires on-the-job experience.

Special training would mean the candidate's job history shows some basic skills but needs concentrated instruction and experience before being classified as QJT.

Apprenticeship trainee would mean the candidate has a desire to learn the trade and become a qualified journeyman. Minimum education education standards would have to be met or the candidate would be required to take upgrading courses.

Candidates classified as job ready, OJT. trainees or apprenticeship trainees would then join the union. It is suggested that such candidates could then be dispatched from their home community through a telex connection with the actual union halls located possibly in Edmonton or Vancouver. In this way, northerners could remain in their home community as long as possible. Following dispatch, they would attend the project orientation program (probably held at a construction camp). From this orientation program, the worker would be given his work assignment.

Special training candidates would be assigned to a training area for instruction before being qualified as an OJT.

- 5. For those northerners designated as administrative and clerical candidates, they could then be further classified as job ready, referred to the Nortran program or to attend a business or vocation school.
- 6. For those northerners designated as operations and maintenance candidates, they would be referred to the Nortran program for training.

 $$\Omega $$  Would this type of manpower delivery system also apply to southern workers?

 $$\rm A$$   $\,$  No. They would be hired in the normal manner.



Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

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Q What you have outlined is a proposed framework for a Northern Manpower Delivery System. There have been concerns expressed, however, as to how the northern residents will actually be integrated into the work force. What is your proposal to accomplish this most effectively to satisfy the government guidelines, and to satisfy the ambitions of the northern residents?

Α We have given extensive consideration to this situation and have had discussions with the Canadian Pipeline Advisory Council which is a body composed of representatives of the contractors and unions. As the construction of the facilities for Foothills will be carried out by contractors, and will be under the jurisdiction of trade unions, we can foresee that a special agreement or agreements will be required for a northern pipeline to encompass the special case of integrating the northern residents into the work forces in an acceptable mamner.

Over the past 20 years the pipeline contractors and the trade unions have evolved through negotiation a workable arrangement for the carrying out of construction which has been formalized in the form of agreements which in most cases are adhered to by the interested parties. We feel. however, that the project proposed by Foothills has unique implications, being that special provisions are required to integrate the northern residents to ensure that they are provided with an opportunity to participate

<sup>:</sup> and derive the benefits from the opportunities for



Burrell, Jensen, Ellwood, MacLeod, Devell In Chief

Foothills would therefore

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gram necessary?

Α Because in our opinion the majority of the work force will be working in an

employment that will be available on the project.

In order to achieve this participation, it is necessary in our opinion, to bring the interested parties together to negotiate a special project agreement in order to establish hiring procedures that will accommodate the northern residents.

propose that upon receiving the necessary approval, it would initiate this process through a request to the Canadian Pipeline Advisory Council (for matters pertaining to pipeline construction, for example), to meet with the representatives of the northern residents and negotiate a satisfactory project agreement that would encompass their participation in a manner satisfactory to all interested parties.

We feel this process would be in the best interests of all parties, and would fulfill the government guidelines most effectively. The proposed Manpower Delivery System would be a means of implementing the terms and conditions developed and set out in the project agreements.

Mr. Ellwood, does Foothills intend to provide an orientation program for its work force?

WITNESS ELLWOOD: Yes, we do.

Why is an orientation pro-



Burrell, Jensen, Ellwood, MacLeod, Deyell

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2	environment unfamiliar to them and under regulations
3	that may be unique to this project, in our opinion it
4	will be necessary to provide appropriate orientation.
5	Q What is the proposed con-
6	tent of the company's overall orientation program?
7	A It is proposed that the
3	orientation program will include
9	(1) an explanation of camp rules and regulations
()	including conduct codes and equipment, building and
11	vehicle usage;
12	(2) am explanation of permit stipulations and other
L 3	applicable regulations;
14	(3) provision to the southern workers of some understan
15	ing of northern cultures and lifestyles and to the nor-
16	thern worker some understanding of the working condition
17	they will encounter;
8 1	(4) introduction to and explanation of the on-site
L9	counselling services; and
20	(5) techniques of survival under Arctic conditions.
21	Q How will these orientation
22	programs be presented?
23	A We intend to use a series
24	of one or more presentations of a style which is informa
25	and easy to comprehend. Video aids will be used to the
26	greatest extent possible.
27	Q What segment of the work
8 28	force will receive the orientation program?
9	A All construction personnel

will receive orientation. However, it would be



Burrell, Jensen Ellwood, MacLeod, Deyell In Chief

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impractical to assume that one orientation program would suit the needs of all different parties involved. Therefore, we envisage the formation of at least three different types of programs, each aimed at a specific target group. At present it is thought that these groups would be:

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(a) the southern work force:

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(b) the norther work force; and

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(c) the supervisory personnel employed by Foothills and our contractors.

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While the contents of each of the programs would be similar, there will be a need for a change of emphasis in specific areas in order to meet the needs of the target group in question. The most comprehensive orientation program will be reserved for the supervisory personnel employed by Foothills and the contractors.

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> Where and when will the 0 orientation programs be conducted?

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For southern supervisory Α personnel, the program would probably be conducted in the south prior to the actual start of construction.

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Since contracts will be awarded at various times over the construction period, this will be an ongoing activity.

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For the northern work force, preliminary orientation could be initiated in the home community as part of the Northern Manpower Delivery System and continue when the work force is at the job-

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site.



Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

For the southern work force.

Who should assume

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at the time of hire or on arrival at the construction

preliminary orientation could be conducted in the south

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responsibility for these programs?

Α We believe that if these programs are to achieve maximum benefit, responsibility for some aspects of the orientation should rest with the governments, the native organizations, the contractors. and the unions, in addition to Foothills' own staff.

0 How do you intend to conduct the orientation program for the operations and maintenance personnel?

We intend to follow a program similar to that described by the witnesses who appeared on the Nortran panel.



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O Mr. Devell, for the operations phase, has Foothills forecasted the number of positions which could be filled by northerners?

WITNESS DEYELL: We have made a forecast by job category of the number of personnel which would be required to operate and maintain the pipeline. Following that, we determined those positions which must be filled by experienced personnel and those positions which could be filled by trainees. This forecast was made with the aid of experienced O & M personnel from our two sponsoring companies.

In filling jobs, northerners will be given priority and all trainee positions could be filled by northerners.

Some of the positions requiring pipeline experience, including supervisory categories, will undoubtedly be filled by trainees currently in the Nortran programme. It is highly probably too that such positions as carpenters, automobile mechanics, plumbers, electricians, pilots, secretaries, socio-economic counsellors and housing administrators as examples, which are classified as experienced, but do not require skills special to a natural gas pipeline system, can also be filled by northerners who possess the required experience.

Table four in the appendix shows in summary form, our present forecast of the number of operating and maintenance positions which must be filled by experienced personnel and those positions which could

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In time, it is expected that

be filled by trainees. Also shown are the number of
Nortran trainees currently with Alberta Gas Trunk Line
and the occupational categories in which they are
employed. In addition, under the Nortran programme,
approximately 13 Nortran trainees are receiving on the
job pipeline O & M training with TransCanada Pipe Lines.
This forecast shows that of the

258 permanent operational phase positions with the pipeline, 148 or 58 percent are classified as training positions.

Should Foothills receive the necessary approvals to construct and operate its proposed pipeline, we intend to provide the additional operational phase training through an expanded Nortran programme. We have been assured by our two sponsoring companies, West-coast Transmission Company Limited and the Alberta Gas Trunk Line Company Limited, that when we receive the necessary approvals to construct and operate our proposed pipeline, they will make the on the job training positions we require available to us. We intend to place the trainees with these two pipeline operating companies until such time as our pipeline goes into operation. At that time, on the job training will be transferred to the north.

The Foothills' training programme will be an on-going career development process directed towards upgrading the skills of its personnel thus providing them with the opportunity to advance to positions of increasing responsibility.



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northerners will be employed in positions of supervisory and managerial responsibility.

During the construction period, we intend to offer the operations and maintenance trainees employment as inspectors, materials men, inventory controllers, etc., in the construction management division of the company.

As each particular construction contract is completed, the trainees assigned to that aspect of the construction programme would return to the south to continue with their operations and maintenance training. This practice will not only expose the trainees to the facilities which they will eventually be operating but will also enable them to realize the higher wages which the construction phase offers. We believe this approach will provide northerners with the incentive to pursue the long-term employment opportunities associated with the operations phase.

Q Mr. Deyell, the Nortran panel of witnesses gave evidence on the evolution of the Nortran training programme. What involvement have you had with the northern training programme?

A I have been involved since the summer of 1970 when the Alberta Gas Trunk Line first conceived its northern training programme. I was directly responsible for the planning, organization and development of the programme from its inception until late November, 1970, when Art Giroux was hired to manage and further develop it. During the period when the training programme was totally within AGTL, as part of Gas Arctic Systems,

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Burrell, Jensen, Ellwood, Deyell, MacLeod In Chief

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I continued to be responsible for its policy and overall direction. Following the merger of the Gas Arctic Systems and Northwest Pipeline Study Groups to form the Canadian Arctic Gas Pipeline Study Group, responsibility for the training was transferred to CAGPL and I became AGTL's representative on the Steering Committee.

Later, I was involved in the negotiations which resulted in the formation of Nortran.

I remained a member of the Nortran Steering Committee until 1975 when John Burrell of Foothills and Charlie McCall of AGTL became our members.

Although I'm not an active member of the Steering Committee now, I still maintain a high level of interest in the programme.



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Burrell, Jensen, Ellwood, MacLeod, <u>Devell</u> In Chief

Q Mr. Deyell, why did AGTL form

the Morthern Training Program?

A From the commencement of our operations in Alberta in 1957, we have steadfastly pursued a policy of local hire.

We believe, and this is proven by our operating evidence that residents of any area in which a pipeline company operates provide the most stable work force.

In early 1970, A.G.T.L. conducted community meetings in the villages along the Mackenzie River from Fort Simpson to Inuvik. The residents of the communities expressed a strong interest in working on the construction and even more in the ultimate operation of our proposed pipeline. Our initial contacts were made at that time because we knew that it would take time to train natives of the north for jobs that require tradesmen skills. As we were then preparing to be in operation as early as 1975, we recognized the urgency of the training task.

Q When A.G.T.L. left the CAGPL consortium in 1974 to put forward an alternative proposal, the Maple Leaf project, why didn't A.G.T.L. also withdraw from the Northern Training Program?

withdrawal from the CAGPl consortium, consideration
was given to also withdrawing the A.G.T.L. training
group and carrying on alone. Since the training
program format in use was virtually unchanged from that
developed by A.G.T.L., it would not have been too
iifficult for us to do this. However, we did not withdraw



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Committee and in particular that of Bud Hollands and myself about the effect of such a split on the northern trainees. Besides, while we did have a basic philosophical disagreement with the CAGPL project, we had no disagreement with the objectives of the Northern Training Program. As a result, the companies subsequently agreed to make the training program independent of all adversary parties. The program was called and still is, the Northern Petroleum Industry Training Program, or as it is better known, Nortran.

Q Are you satisfied with how the Nortran program has worked to date?

A Yes, I am. It is gratifying to me to see that in an area of common interest
two competing organizations can put their differences
aside and work together for the good of all.

Q You have been involved with a northern training program now for over five years.

What is your assessment of the program?

A Although the epilogue to the training program for northerners cannot yet be written, the results to date are gratifying to all of us who are involved. It is a good start and encourages us to strive to make the program even better.

As of the end of June, 1976,
Alberta Gas Trunk had 24 permanent trainees. We also
arranged for 15 training positions last summer for
work on construction of our pipelines and compressor
stations and we are intending to the same this year.

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Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

Of the original 16 men that started with us in January, 1971, seven are still with us. Many of the others brought into the program since that time have been with us over three years.

Among the more successful trainees, one is a counsellor, one is a journeyman welder with both an A and B ticket, three are journeymen controls technicians, eight are qualified pipeline operators, and one is a measurement technician. Most of the qualified technicians and operators have successfully taken courses both academic and vocational to enable them to complete their training.

Q Mr. Deyell, from A.G.T. L. s standpoint, why do you believe you have been successful with the Northern Training Program?

A It's difficult to quantify the reasons, but I believe that the attitude of the company from the president on down was very significant. Our president, Mr. Blair, whole-heartedly and enthusiastically encouraged us in the planning and development stage and adopted an attitude that the program must work, and failure would be completely unacceptable. This attitude was universally adopted and practiced throughout the company.

Another important reason would be our-choice of the direct supervisor. Our travels in the north and meetings with Territorial Government personnel and natives led us to the conclusion that the supervisor must be a northerner who understands the north, its people and the environment. This person



Burrell, Jensen, Ellwood, MacLeod, <u>Deyell</u> In Chief

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would have to be friend, confidant, mother-hen and overseer, as well as being supervisor. We found such a person in Art Giroux, and he deserves considerable credit for the success of the program.

Prior to implementation, we discussed the program with our supervisors and regular employees that would be closely associated with the trainees and solicited and received their dedicated support for it.

The trainees and their families were made to feel at home and were accorded all the same rights, privileges, etc., that our regular employees had. On a personal note, I visited the initial group of 16 at Rocky Mountain House and held bull sessions with them in a very informal manner. My office in Calgary was always open to them to visit with me without notice and I was always available by telephone if they wished to talk. It was all a part of trying to make them feel wanted and accepted on the same basis as the southerners.

permanent jobs with the company. They were advised that we would encourage them to return north to the pipeline when constructed but would not insist on it. In other words, they would be permanent employees of A.G.T.L. as long as they wished to be, Apart from subsidized vacation time and travel expenses, they were not accorded special privileges over and above what regular southern trainees were accorded.



Burrell, Jensen, Ellwood MacLeod, Deyell In Chief

O Mr. Deyell, you said ear-

lier that A.G.T.L. and Westcoast Transmission had assured Foothills that they would make sufficient job training positions available to enable Foothills to provide pipeline on-the-job training to all its trainees prior to the Foothills Pipe Line becoming operational. Would you expand on this statement, please?

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Purrell, Jenson, Fllwood Deyell, MacLeod In Chief

That is true. Both

Westcoast and ourselves have reviewed the Foothills'
training position requirements and we see no difficulty
in making this number of positions available. Since
Foothills intends to follow the Nortran program format,
it's just a case of expanding upon what we are presently
doing and we are prepared to do this as soon as
Foothills receives the necessary permits to construct
and operate its pipeline. We see little problem in
doing so.

We now have a field pipeline operating and maintenance staff in excess of 600 and we operate from four district headquarters, each of which as one or more sub-district offices. Each of these offices has a maintenance crew ranging from six to 20. If necessary, we could add at least two trainees to each of these crews to accommodate a total of 25 pipeline maintenance trainee positions. In addition, we operate 26 compressor stations in our system. Trainees could be added to compressor station operating crews to provide on-the-job training in compressor station operation and routine maintenance.

We have about 135 controls, automation and measurement technicians on staff. If necessary, we could place trainees with each of these technicians in a ratio of approximately one to two and thereby train 60 to 70.

We have five mechanical technician crews with approximately six per crew, plus a machine shop and overhaul shop. We would have no



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difficulty adding trainees to each of these crews and shops for a total of 12 to 15 mechanical trainee positions.

Warehouse trainees could be placed into the existing warehousing facilities in Calgary and Edmonton as well as with materials men on AGTL. construction projects.

As for automobile mechanic, welder and electrician positions, we already have northern trainees involved in apprenticeship training. How the new trainees would fit into the apprenticeship program would be difficult to say right now without knowing the educational background and work history of the candidates. To qualify for entrance to these in most cases requires at least a grade ten education plus industrial mathematics and science. As has been the case with our present northern trainees who have pursued an apprenticeship program, it may prove necessary for the new candidates to first upgrade their education. The decision to do so of course lies with the candidate.

As for clerical and stenographic staff, we would have no difficulty placing 16 trainees in our present AGTL operations.

Q Mr. Deyell, you said
earlier that AGTL presentty had 26 Nortran training
positions. Is AGTL prepared to expand this number of
Nortran training positions prior to receipt by Foothills
of the permits necessary to construct and operate its
pipeline?



Burrell, Jensen, Ellwood Deyell, MacLeod In Chief

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A No. One of the features of this training program is that trainees, on being hired, are offered permanent employment with AGTL and are accorded all the rights and benefits of the other employees. Bearing in mind that we must also offer employment to Albertans, it would be difficult or impossible for us to increase the number of Nortran training positions without the knowledge that they would have permanent employment opportunities with the Foothills' pipeline system.

Q What training positions would Westcoast Transmission be making available to Foothills?

A In discussion with Westcoast management personnel, they have said Westcoast
could provide on-the-job training for up to the
following numbers of trainees within their pipelime
operations and maintenance department.

Pipeline maintenance men	15
Compressor maintenance men	40
Controls technicians	6
Mechanical technicians	25
Warehousemen	5
Apprenticeship trainees	10
Clerical and stenographer	10

A comparison of the number of training positions available in Foothills with the training positions which AGTL and Westcoast are prepared to provide, shows that more than enough training positions would be made available in the existing operating



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Q Do you believe these

trainees could be sufficiently trained between the time permit issued and the time they are required for operation of the Foothills' pipeline?

companies to satisfy the Foothills requirements.

men, warehousemen, clerks and administrative staff could be sufficiently trained in that time frame.

All tradesmen such as welders, mechanics, electricians, etc. who have apprenticeship programs to complete that range from three to four years obviously could not unless they had some prior training that would reduce the time required to get their journeyman tickets.

Controls, computer and measurement technicians do not require journeyman tickets and their apprenticeship time period is set by the company. Their program could be condensed to fit the available time frame.

With respect to those trades requiring journeyman tickets, it would be necessary for Foothills to hire journeymen from the south on a temporary basis until the natives had completed their training.



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Burrell, Jensen, Ellwood, Deyell, MacLeod In Chief

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Q Would you agree with the statement that the long-term success of your northern

hiring and training programmes will depend on the development of employment policies and procedures which are

acceptable to your northern employees?

than 20 years of operating experience in Alberta and British Columbia, both of our sponsor companies have established methods whereby their employees play an active role in determining the operating policies and procedures of the company. I am confident that this practice, combined with the fact that Foothills is a regional company, will ensure that policies and procedures can be developed which are mutually acceptable to the employees and the company management.

Q Would you describe the method by which your company policies and procedures are established in the area of employee, employer relations?

A For now, Foothills has adopted many of the policies and procedures of Westcoast and Alberta Gas Trunk in this as well as other areas of the company's operation. We have therefore, a very substantial base from which to develop the policies and procedures appropriate for our company. The policies of our sponsor companies have evolved over the years and they are continually being changed and improved as a result of recommendations put forward by the Employee Relations Councils, which are composed of elected representatives of both salaried and hourly wage employees



and appointed representatives of management. The Councils meet regularly to consider items which any member may wish to place on the agenda.

These policies and procedures govern the operation of the company with respect to matters such as: hiring and terminating staff, salary and benefits administration, hours of work, use of intoxicants and treatment of alcoholism, vacations and holidays, shift work, transfers, continued education, and safety.

We consider the active involvement of our employees in determining the operating policies and procedures of the company to be a key element in successfully hiring and retaining our staff and it is our intention to use a similar approach here in the Northwest Territories.

Q Mr. Burrell, would you please outline the policies and objectives of Foothills as they relate to the provision of opportunities for northern business?

WITNESS BURRELL: We realized that not all northerns will necessarily want to work directly on the pipeline. There are many northerners presently operating their own business, who will want to continue working for themselves and there are others who have the desire to operate their own business. We realize too that northern business employs local residents and as such, are in a position to provide long-term benefits in the northern communities.



Burrell, Jensen, Ellwood, Deyell, MacLeod In Chief

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We believe that there are many opportunities which the pipeline project can offer to the northern businessman. We also believe that the extent to which northerners will get involved with business opportunities whichthe pipeline offers will depend not only on the desires of the people themselves, but to a great degree on the policy positions taken by the pipeline company itself.

A prime objectice of Foothills is to maximize within practical limits the participation of northern business in our project. Our overall policy will be to encourage and support the development of northern business enterprises and to maximize the Northeki Content of our project in much the same manner as we are working towards maximizing the Canadian content of the overall Maple Leaf Project. In order to carry out this policy, we will purchase goods and services from resident northern companies whenever it is practical to do so.

What do you see as Foothills' prime role in entrepreneurial development? We see our prime role A

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as being the formation and implementation of policies to encourage entrepreneurship where northern people desire it.

With respect to the 0 encouragement and involvement of northern businessmen in your project, what policy positions has Foothills established?

> From our discussions with A



Burrell, Jensen, Ellwood, Deyell, MacLeod In Chief

northern businessmen, it became evident that in some instances they are at a competitive disadvantage to southern based firms. Many of our policies are directed towards elimination of such disadvantages.

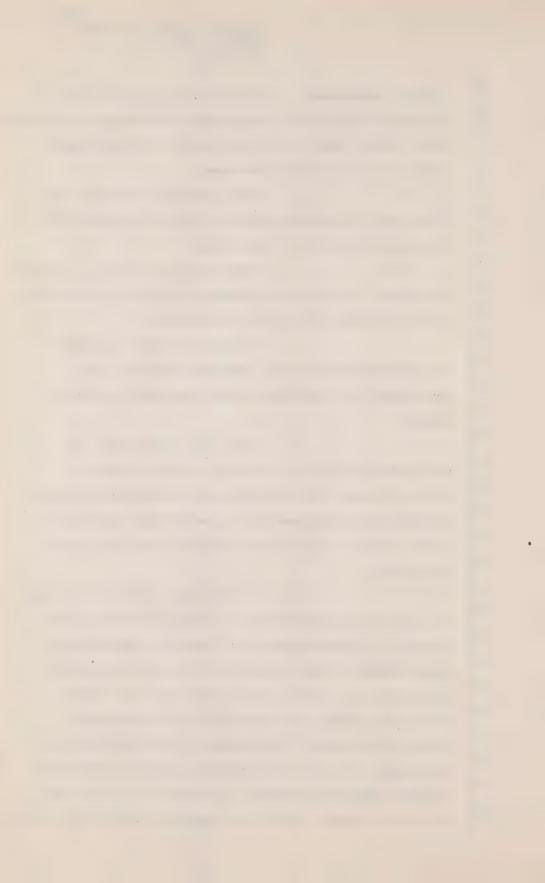
One, whenever practical, contracts will be made available in proportions which will be manageable by small local firms.

Two, whenever possible, a greater than normal lead time with regards to bidding on contracts will be provided the northern businessman.

Three, We would be prepared to participate with other interested bodies in the development of a satisfactory and organized tendering system.

Four, we believe that the most effective means of involving northern business will be through the utilization of predetermined bidders listings and procedures which give northern businessmen a fair chance at winning the contracts they are capable of handling.

In addition, Foothills will have its operations headquarters in Yellowknife where close contact can be maintained with northern companies and organizations. Also, there will be district operating headquarters in Inuvik, Norman Wells and Fort Simpson which will provide local contact for the purchase of goods and services. Contractors and sub-contractors on our project will also be required to purchase from local northern businesses whenever practical and where there will be no adverse effects on community supplies or services.



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Q What is Foothills'

approach to encouraging entrepreneurship for local northern business?

A When entrepreneurial

opportunities will be available -- while entrepreneurial opportunities will be available during the construction phase, we believe it is most prudent to look at the operational phase as providing the best opportunities for long-term benefits. We will engourage the pursuit of this approach but we don't intend to be rigid and we will adjust to suit changing needs and situations. Certain northerners, individually or in groups, may wish to pursue an entrepreneurial role during the construction phase and there will be opportunities for them to do so. Foothills will certainly co-operate to make this possible. However, caution will need to be exercised so as not to stimulate the formation of a new business which could not be sustained following completion of the pipeline construction phase with resultant hardship on the northern business and the community.

Q What specific opportunities for small northern business will there be during the pipeline construction phase?



## Burrell, Jensen, Ellwood MacLeod, Deyell In Chief

includes clearing of the right-of-way, revegetation of the right-of-way, concrete weight manufacturing, supplying lumber and piling, trucking, supplying gravel, expediting, warehousing, construction of houses and office buildings, supply of automotive parts, groceries, bulk fuel and many more. However, as can be seen, many of these local business opportunities are of short duration.

Q How does Foothills intend to make northerners aware of the business opportunities which its project will offer?

A We intend to identify
the business opportunities which are potentially
available to the northern businessman in light of
their capabilities and desires. We expect that in doing
so, the Mackenzie Pipeline Business Opportunities
Board will play an important role. Following the
identification of such opportunities, a basic description
of each will be developed, including nature of the
work, income potential, the basic skill requirements.
This information will be presented to the Mackenzie
communities directly and through the Mackenzie Pipeline
Business Opportunities Board.

Q Has Foothills commenced the preparation of a northern bidders' list?

A Yes, we are presently in the process of compiling lists of northern suppliers and contractors which would be utilized by our Purchasing Department.



Burrell, Jensen, Ellwood MacLeod, Deyell In Chief

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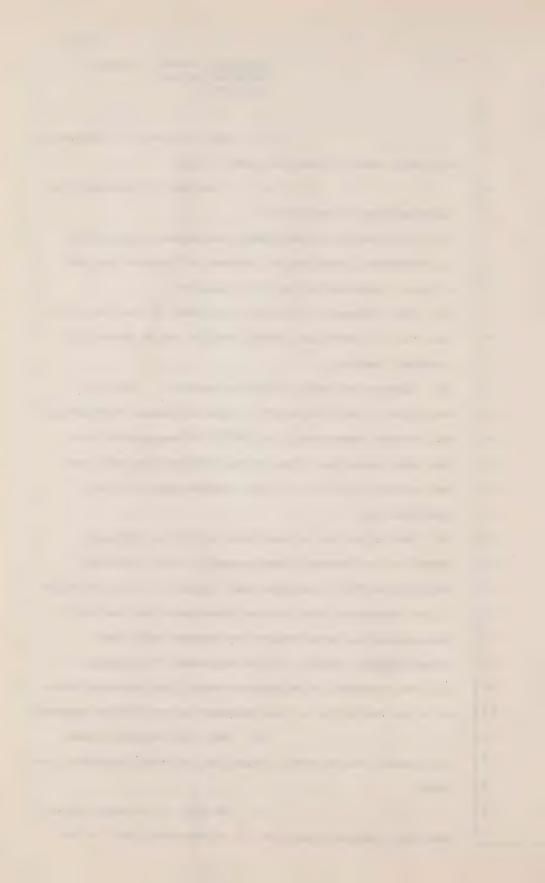
A A variety of sources are being utilized, including:

What sources of information

(1) The Inventory of Northern Businesses prepared by the Northwest Territories Chamber of Commerce as part of their presentation to this Inquiry;

are being used to compile such a list?

- (2) The Business Directory, published by the Research Institute of Northern Canada and for which Foothills provided funding;
- (3) Discussions with local businessmen. Foothills maintains a resident staff in the Northwest Territories and several members of the Foothills' management team have made numerous trips to the Territories and have made efforts to talk to local businessmen at every opportunity;
- (4) Participation in meetings held by an Advisory
  Committee on Economic Development in the Northwest
  Territories. This committee was formed on the initiative
  of the Northwest Territories Government and has on it
  representation from various businesses and other
  organizations located in the Northwest Territories.
- (5) The Mackenzie Pipeline Business Opportunities Board of which Foothills is the originating sponsoring company.
- Q Why did Foothils elect to sponsor the Mackenzie Pipeline Business Opportunities Board?
- A We felt if we were going to maximize the participation of northembusiness in our



Burrell, Jensen, Ellwood,
MacLeod, Deyell
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project, we needed to be well aware of the business capabilities which exist in the north, what difficulties the northern businessman is encountering in attempting to obtain work, what concerns he has, and how from a northern standpoint the procurement procedures of our project could be structured so that the local businessman is in the best position to take advantage of the opportunities which will be available. What better way to get input on this than from the people who have operated a business in the north and have experienced the difficulties in getting it established and then having to maintain it? For these reasons we elected to sponsor the Mackenzie Pipeline Business Opportunities Board. We consider this sponsorship an important step forward and consistent with an early approach by The Alberta Gas Trunk Line Company Limited when in 1970 it created an on-the-job training program in order to provide pipeline employment opportunities for northerners. This program of course, has since evolved into Nortran.

Q Will you please describe the Mackenzie Pipeline Business Opportunities Board?

Α

Although Foothills

sponsors the Mackenzie Pipeline Business Opportunities
Board, it does function as an autonomous organization
operating independently of its sponsoring companies and
it would be improper for me to speak of its specific
activities. I can, however, outline the purpose,
objectives and organization of the Board. This information is taken from a document which the Board



## Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

pertaining to the Board's activities, these would more appropriately be answered by the Board itself, probably through its chairman, Mr. Dick Hill of Inuvik.

The purpose of the Board is to assist the positive involvement of northern residents in the business opportunities created by the proposed Mackenzie Valley Pipeline system and associated activities. Its objectives are:

- (1) to ensure that resident northern businessmen have the opportunity to participate in and benefit from the construction and operation of the proposed Mackanzie Valley Pipeline:
- (2) to provide present and potential northern business with an understanding of pipeline associated business opportunities;
- (3) to promote an awareness of pipeline business opportunities amongst the northern public, special interest groups, government and industry; and
- (4) to provide an interface for two-way communication between resident northern businessmen and the pipeline companies, including their construction contractors and sub-contractors.

Foothills has requested the Board to advise it on those policies and procedures which we should undertake in order to maximize northern business involvement in our project.

The Board will be composed of up to seven long-term northern residents with wide experience in business. The Board members are familiar with Mackenzie Valley Pipeline opportunities and are



representative of the Mackenzie communities.

The operations of the Board are handled through a secretariat with specialist staff contracted for research and evaluation, as required. The Board meets regularly at various locations in the Mackenzie Valley to set policy and to commission activities in the areas of consultation, co-ordination, communication, and training.

It will have contact with active and potential businessmen and business groups in the Mackenzie Valley to ascertain their interests and provide advice on request.

There will be continuing contact with government and industry as well as any other group interested in Mackenzie Valley resident business development to facilitate co-operation with existing programs.

The Board will prepare studies and reports relating to business opportunities and regional economic development with all publications being available on request to interested parties.

It will provide information and conduct seminars as well as experience trips to assist northern businessmen.

Q Will a strong northern business community be advantageous to the north?

A Yes, a strong northern business community will be very advantageous to the north and for many reasons. It will create additional job opportunities for local people and many northerners



## Burrell, Jensen, Ellwood, MacLeod, Deyell In Chief

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who otherwise would not seek employment may elect to take such jobs. The optimum utilization of resident business and labor force requires that fewer workers and companies be brought in from the south resulting in less social and economic disruption in the region.

Wages and profits by northern businessmen should stay in the north for long-term community growth and benefit.



Burrell, Jensen, Ellwood Deyell, MacLeod In Chief Cross-Exam by MacQuarrie It will also be advantageous

to us to deal with local firms who understand local conditions and have a practical knowledge on how to deal with northern climate, logistics, etc.

In addition, there is always a concern about the ability of small business to perform. A strong business community alleviates some of this concern. We think the Business Opportunities Board can play an important role towards establishing such a northern business community.

MR. HOLLINGWORTH: Mr.

Commissioner, that completes the evidence in chief of this panel. I point out that Miss Jensen has no evidence in chief for this panel. She is on the panel as requested by other counsel from the last time when panel one appeared.

THE COMMISSIONER: Right.

Well, lets adjourn for coffee before cross-examination.

(PROCEEDINGS ADJOURNED FOR A FEW MINUTES)

(PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT)

THE COMMISSIONER: I think

I should say at the outset that I have no questions. Next?

MR. GOUDGE: Mr. Steeves?

MR. STEEVES: I'm trying to

think up a question . I have no questions.

MR. GOUDGE: Mrs. MacQuarrie?

CROSS-EXAMINATION BY MRS. MacQUARRIE:

Q I have some questions left over from the last time Miss Jensen was here.

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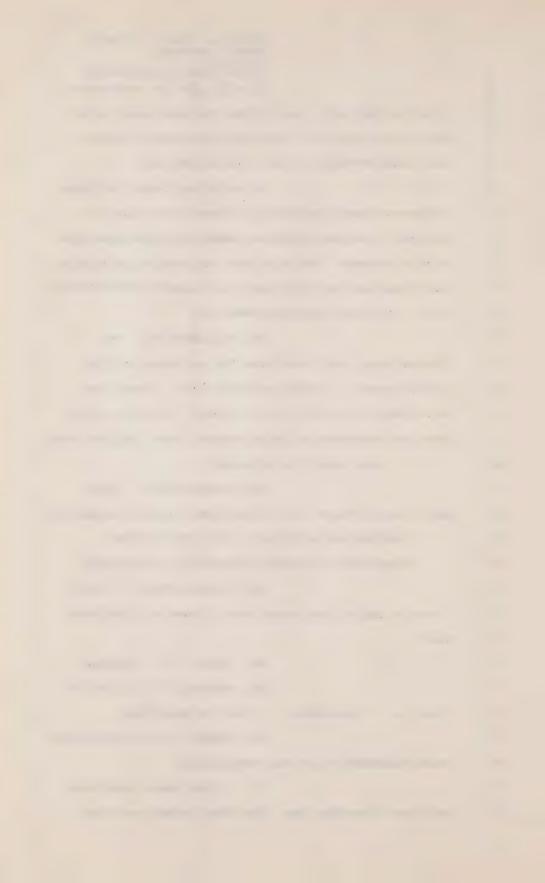
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Burrell, Jensen, Ellwood

Deyell, MacLeod Cross-Exam by Mrs. MacQuarrie 1 THE COMMISSIONER: Oh, right. 2 Of course. 3 MRS. MacQUARRIE: I haven't 4 forgotten. 5 0 Miss Jensen, on page 6 20 of your evidence you mention adequate medical 7 facilities. Could you tell me what criteria you 8 used to ascertain what would be composed of adequate 9 medical facilities in the north? 10 It was to maintain Α 11 the present level of service. 12 That was it? What is 0 13 the present level of services? 14 Α The regional hospital 15 facilities, the nursing stations and the medevacs. 16 Q I'm sorry, I didn't hear 17 you. 18 Α The medical evacuations 19 that occur that go down south. 20 0 I see. You mentioned 21 that the facilities at Norman Wells would be adequate 22 to take care of the industrial accidents that might 23 occur during the development. 24 Α This was assuming of 25 course that most of the construction accidents would be 26 treated on site by the para-medical professionals in the 27 fields. 28 0 Yes. Right. What are 29 the medical services available at Norman Wells currently? 30 Α There is a nursing station

Burrell, Jensen, Ellwood

Cross-Exam by Mrs. MacQuarrie

Deyell, MacLeod

there with two nurses. Then there are the regular

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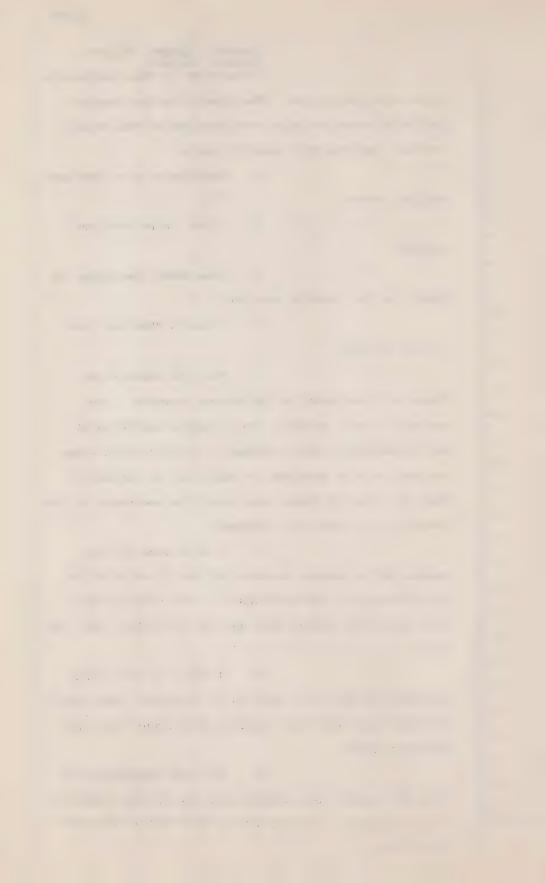
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physician services which are provided by the Inuvik General Hospital on a monthly basis. But there is no resident medical doctor? There is no resident A doctor. 0 How about the number of in the nursing station ? Α I can't remember that figure offhand. Well it seems to me 0 there are four beds in the nursing station , two nurses -- one a midwife, one a public health nurse and no medical doctor resident. Did you visit these various nursing stations or hospitals to determine what is actually there, what would be necessary in the event of an industrial accident? Α I have been in the Norman Wells nursing station but not in relation to specifically to see what was -- I was there to see what was there a long time ago but not within the last year. I see. 0 So you really couldn't be sure that what is in existence there could possibly deal with any injuries that occur along the pipeline then? A Well our assumption is that any medical evacuation that has to take place into Inuvik hospital, if they are in that end of the construction.



Burrell, Jensen, Ellwood

Deyell, MacLeod

Cross-Exam by Mrs. MacQuarrie 1 project and into the southern hospitals if they were 2 in the southern region. 3 Did you determine the 0 4 contractor involved in evacuation? 5 Α There will be transporta-6 tion available at the site. 7 And how much time involved 8 for the flight between the camp and the nearest proper 9 hospital? 10 That is very much 11 dependent on the transportation that is available. 12 0 Well, this is what I 13 wanted to know. What kinds of transporation you have. 14 WITNESS ELLWOOD: Perhaps 15 I could help Mrs. MacQuarrie. We have helicopters to 16 be stationed at all of the compressor station or 17 construction camp locations. There is also a good 18 number of them -- there will be fixed wing service 19 operating out of a lake or some other suitable 20 winter airstrip. I can't recall now where we are most 21 likely to have only a helicopter service which is the 22 difficulty I am having in answering your question. I am trying to figure out how long it would take us 24 to get from there to either Inuvik or to some southern 25 center. 26 There is also a medical 27 evacuation or an air ambulance service that we have 28 spoken with in Calgary. They have a small -- or have 29 under lease as required, a small jet aircraft which they 30

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Burrell, Jensen, <u>Ellwood</u> Deyell, MacLeod Cross-Exam by Mrs. MacQuarrie

use for medical evacuations out of the high Arctic.

A similar arrangement could be put into service here whereby they perhaps take the injured workman into Norman Wells and from there on jet to Edmonton or whatever the case is.



Burrell, <u>Jensen</u>, <u>Ellwoo</u>d, MacLeod, <u>Deyell</u> Cross-Exam by MacQuarrie

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Q So the helicopters that will you/have based at these camps-sites are totally equipped for medical type evacuation, with oxygen, suction, all that kind of thing -- sort of an air ambulance service then.

A I'm not certain of all of the requirements. This was a question that Mr. Scott left with me last time and we are working on that now, but I don't have all the answers at the moment.

Q I see. Have you met with the Federal Government or the health people in the Territories to determine what your needs will be with the increased number of workers you will be having, and to secure their co-operation?

Jensen here did meet with Mr. McDermid and passed onto him our construction plan, and all the data that we had to see what his reaction to that would be, and he didn't indicate to us then that there was any particular problem that he could see, and that we should get back together to discuss this in more detail closer to the actual time of construction.

Q Miss Jensen, on page

20 of your evidence, you omitted the statistics which
refer to the incidence of venereal disease in the
Territories, and also the injury and accident rate.

Could you -- was there any particular reason for your
omission of these two specific figures?

WITNESS JENSEN: The accident



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Territories?

Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by MacQuarrie

1 figures, the projected accident rates were in the 2 appendix. 3 O And how did --4 A The venereal disease I 5 didn't submit them because they weren't relevant to 6 the evidence that I was giving at that time. 7 0 Do you suppose they 8 aren't relevant at all then? 9 Well, certainly they're 10 relevant. 11 I would hope so, since 12 we have twice the national average. 13 Also too, Miss Jensen, you 14 mentioned that much of the problem of providing 15 proper medical or social services in the Territories 16 could be remedied by the hiring of additional staff. 17 The hiring of extra staff increases the need for 18 services right across the board, as far as housing or 19 maintenance services are concerned. Is Foothills 20 planning to share in the cost of the provision of 21 extra services for the staff required to service your 22 employees? 23 WITNESS ELLWOOD: No, we're 24 not, Mrs. MacQuarrie. 25 You mentioned, Mr. Ellwood 26 thatyou have met with Mr. McDermid of Territorial Health 27 Insurance Services. Have you met with the Federal 28 Government since the Federal Government is currently

responsible for the provision of medical services in the



Burrell, Jensen, Ellwood, MacLeod, Devell. Cross-Exam by MacQuarrie

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No, we haven't. We A

haven't met with anybody, but as I recall now, a meeting was arranged with Mr. McDermid by Miss Jensen on the advice of somebody in Edmonton in the Federal Health Services, who referred us first to Mr. McDermid. So that's where we've taken it thus far.

O.K. Is there any -will there be any opportunity for us to secure the information from you once you get it from National Health & Welfare, or Mr. McDermid?

> Α Secure --

What I'm interested and 0 concerned with is the level of medical services that will be available to construction workers and also to people, local residents of the Territories, and if they aren't at a proper level now, with an influx of population they certainly won't be any better then unless there is a definite plan to provide them; and this is the kind of information I wondered if we would be able to have?

Well, with respect to the Α medical and First Aid facilities to be provided in our camps, certainly we will have that as soon as I can get the information together and get it filed with the Inquiry.

M-hm, and how about the 0 results of your meetings with the Federal Government and the Territorial Governm ent?

I don't anticipate that that will be for some time yet.

Burrell, Jensen, <u>Ellwood</u>, MacLeod, Deyell Cross-Exam by MacQuarrie

Q O.K. One other question in regard to that. Will your workers be aware of the level of medical services available before they come to the Territories?



WITNESS JENSEN: Are you referring here to construction or operations and maintenance?

Q Construction and operation and maintenance.

I don't want to say I'm familiar with all of the specifics of these facilities provided in the camps, but in general they know what to expect because one camp situation is very much like another. So, in general, the workers all know, because they've all worked on construction before, what to expect when they arrive here, but with respect to where the hospitals and nursing stations are in the north, no I don't anticipate that many of them will know that.

Q But your company will assure them that they will have adequate services when they need it, is that so?

A Yes, definitely we intend to provide an adequate level of protection for employees

O Okay. Just a final

question, Ms. Jensen. On page 70 you refer to competent medical authorities have advised you etc., who were these competent authorities?

WITNESS JENSEN: Primarily,

Mr. Carrier the Zone Director in Inuvik and Mr. McDermid

O I see.

With regard to the evidence that was presented today, Mr. Ellwood, it seems to me in previous testimony Foothills didn't have a specific



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training programme for counsellors and this somewhat conflicts with a statement on page 65 today, where Mr. Deyell states that among the more successfull trainees, one is a counsellor.

WITNESS ELLWOOD: That's Rick

Behn?

WITNESS DEYELL: Well, I'll

try to answer that for you Mrs. MacQuarrie, the type of counsellor that we're referring to here, I believe you know the gentleman, we're talking about Rick Behn. He is not a trained counsellor, I would think that you're referring to. I think you're probably referring to somebody who has had extensive training in -- let's perhaps say, mental health and that type of thing. Is that what you're referring to?

Q Well, just generally counselling and the outline that you had provided previously, yes.

A And the kind of counseller we're talking about is the type of person who understands his fellow man and that's really just -- it's a practical type of counsellor, as Behn is. He's not trained specially in that particular role.

Q But did he receive special training as part of the Nortran programme?

A He hasn't had any

special training in that particular regard as yet.

Q Well, his training then,

under the Nortran programme, what did it -- how did it

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prepare him to become a counsellor?

A Well, as far as I could ascertain, he just happens to be one of those people who has a gift for dealing with his fellow man and the problems that they have, but he has had no special training

Q I find that a little confusing if he emerged from your Nortran programme as an excellent counsellor. I'm sorry, it's my own confusion perhaps, but could you clarify that?

any occasion with any of our employees to give them
any psychological or psychiatric treatment. If we have
a need for this, they are directed to those people who
have the training that are outside of our normal training
facilities, and I think if this is required for Nortran
employees, it would be done in the same way.

Q But then, you haven't answered my question, how could he emerge from a Nortran training programme as an excellent counsellor?

A Well, I guess it's in a description of what kind of a counsellor we're talking about. Behn will be able to counsel his fellow man in job problems related to the kind of work they're doing and that is really the only counselling he gives.

Q Yes, but -- fine. In the Nortran training programme, did he receive courses in that particular area then?

A No, he hasn't had them.

Q Or he came in with that

already as --



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A No, he has not had

special courses in that regard.

Q Thank you.

On page 51 of todays evidence,

I wondered if you had reached an agreement with Canada
Manpower to provide information and counselling as
outlined on that page?

WITNESS BURRELL: You're saying,
have we reached agreement with Canadian Department of
Manpower with respect to establishing a Northern
Manpower Delivery System?

Q Yes.

A Are you saying that?

Q Also -- yes, and the

second part of that then would be, if not, who will provide this delivery system.

A Oh, I see what you mean.
Well, as far as the -- as far as the Northern Manpower

Delivery System is concerned, we've -- this is our idea but of course we've -- our outline of how we see it, but it's been developed in a conversation with the Department of Manpower, DIAND, representatives of the Northwest Territories Government, Nortran people and it's an on-going thing and certainly as we were developing this, as I said, we had talks with Canada Manpower and what we were developing at the time they were in agreement that the system, as we're outlining, was reasonable and a good way to go.

Now, as far as an agreement



Burrell, Jensen, Ellwood, Deyell, MacLeod Cross-Exam by MacQuarrie

as to who would take the responsibility for doing certain parts of the manpower system or the overall -- no, we have not got an agreement as yet, with anyone on that.

Q So this is all just

tentative then?

A As I said, it's a possible manpower delivery system that is to demonstrate how northern people could get involved from the community into construction phase activities.



fact carry it out.

Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by MacQuarrie

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This all is tentative, but no further decisions have been made as to who will in

NO

O I think I mentioned this concern before, that with the collective agreements already signed, it doesn't appear that the resident northerner will have much of an opportunity to procure work with the -- on the operational or even the maintenance phase of the pipeline without becoming a member of the union, and with the initiation fee very high, how can -- have you -- can you tell me how northern people will be able to secure proper employment?

operations and maintenance and construction, in all of the major gas transmission companies that I am aware of in Canada, are non-unionized for their operations and maintenance. Our company and Westcoast Transmission are in that particular category so there isn't a problem with respect to operations and maintenance.

Let's talk about con-

Well, I will perhaps

WITNESS DEVELL: Mrs. MacQuarrie:

struction then.

give you a bit of that answer, but I am not party to the negotiations or anything that's taken place with respect to Foothills; but I don't believe that any agreements have been signed with respect to constructing a pipeline in the north as yet. I believe that the

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collective agreements that were referred to are ones



Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by MacOuarrie

that are in existence at the present time for construction in Canada per se, but I don't believe that they have actually dealt with a northern pipeline as such.

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If the Northwest Territories rates are listed in this pipeline agreement, then would this not also include the construction in the Mackenzie Valley?

I rather doubt that. Mrs. MacQuarrie. This would be a pipeline of such a magnitude that a special agreement will have to be entered into. I would say that what they expect to have in those agreements that presently exist are for small portions of pipeline that have already been constructed. I believe there's been one small one in the Pointed Mountain area, but certainly for a project of this magnitude it would have to be a special agreement.

## Q Yes?

THE COMMISSIONER: I think that's right, there would have to be a special agreement, and the Inquiry -- Mr. Goudge is, I understand, going to call pipeline contractors as witnesses and the representatives of the unions. I think that's early in September, and I think we'll perhaps learn more from then than we will from this panel simply because they are the people that really I think we should take the matter up with.

But if you, Mr. Deyell, have anything else to add, don't hesitate to do so.

A think there's anything more useful to add to that.

No, I don't, sir, I don't

Burrell, Jensen, Ellwood,
MacLeod, Deyell
Cross-Exam by Bayly

MRS. MacQUARRIE: Thank you

WITNESS BURRELL: That possi-

Tell me first which

Well, the one, the

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very much. I'll wait for the union people then.

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MR. GOUDGE: Mr. Bayly?

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## CROSS-EXAMINATION BY MR. BAYLY:

possibility, because I gave you two.

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Q Just to follow up on what Mrs. MacQuarrie has just left off with, that is the consultation that you have had with unions such as it may be at this stage. You talk in your evidence -- and I believe this is in the evidence of Mr. Burrell -- you talk about construction job training. Will this

bility exists. Of course you realize that the unions --

possibility that the unions and the pipeline contractors

could conduct the special training. That possibility

exists. Mr. Kosten in his written evidence here has

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training as you envisage it, be conducted by the unions

or by the company?

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indicated that the union and pipeline contractors have gone together and conducted this special training in the past and that I would think that that possibility would continue through this project is there.

Q To your knowledge, is

that something that has been discussed at this stage with the unions with regard to this particular pipeline?

A No, that detail hasn't

been discussed, no.

that question, please?

Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Bayly

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Q Has it been discussed

either in the company itself or with the unions, whether the construction job training would or would not lead to union certification?

A Would you mind repeating

Q Has it been discussed within Foothills to begin with, whether it's one of the objectives of the company that the construction job training should lead to union certification for those workers participating in the northern construction training programs?

Well, as far as the Α union involvement is concerned, it does say in Mr. Kosten's evidence that the big inch pipe is done by union contractors, and therefore people that are hired to work on that phase of the pipeline would have to be unionized. Now, as far as the training is concerned, we in Foothills and the people in the unions and the pipeline contractors recognize there has been some -there is some training required, whether it be special training, as I referred to in here, or on-the -job training, it can be either one of those or both but I think you have to realize that this is part of the development of the project agreement and we really can't proceed with the development of the project agreement until of course a permit is issued, and we know under what ground rules the project will go forward.



Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Bayly

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All right, I am concerned

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with your own objectives because you talk about job training as an objective. In this part of the country as you are probably aware, people get certificates that say they are qualified to do certain things that unions won't recognize. They'll got to training schools in places like Fort Smith and some unions won't recognize that they are cat operators even though they have that certificate.

Well, in this manpower delivery system, we referred to the screening process whereby the experience of the people would be reviewed by the Screening Board. From there, it would be decided as to what craft they would go into. certainly their experience would be evaluated at that time and they would be assigned to an area which would meet their qualifications. So, yes, their experience in the north here would be a factor certainly.

I understand that but 0 what I am trying to get from you is whether the company has a policy which is or is not to lead the northern employee to the point where he can be certified for union jobs or whether he will always be a special employee.

Well, the object of the game is to -- I am sorry -- the object here is really to provide the employees with the training to enable them to advance to a more responsible position. When you start off with the training, that's the intial phase. As they advance, they move into more responsible



Burrell, Jensen, Fllwock Deyell, MacLeod Cross-Exam by Bayly

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unions.

qualified journeymen.

Q So the objective is to allow them to train in such a way that they will be led towards recognition as tradesmen by the various

positions and as they meet the requirements of an

operator's job for instance, then they become fully

A Certainly. As we say in the evidence here the purpose of the program is to provide the northern people with the opportunity to advance to levels of higher skill and into areas with supervisory responsibility.

Q The only thing you have to get to put that policy into effect is the agreement of the unions?

phase, there is a number of parties involved of course and the means by which this will be accomplished has to be agreed to by these parties and it's part of the project agreement. As far as the 0 & M phase which we believe is the more important because it does provide the long term employment opportunities that the pipeline will offer, we already have in place the Nortran program and it is directed toward that very thing; to provide the training to allow northerners to move into positions of higher responsibilities and greater skills.

Q Yes. But you do require the cooperation of the union in reaching this objective?

A In the construction



Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Bayly

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phase, certainly. All the parties are involved.

0 Now on page nine of the direct evidence and I believe this is Mr. MacLeod's evidence, there is a statement that five to 800 people were available for employment at the end of 1974 With other witnesses, we have been interested in where that figure comes from. How are people classified as available for employment. Can you tell me where that figure came from?

WITNESS MacLEOD: Well that figure came from Hire North.

THE COMMISSIONER: Hire North,

That's what you told us isn't it? A Yes. Yes. I was told

by Hire North that at any given time, they could count on having 500 people at their disposal. In the course of a year, they would have 800 people. So in terms of man-years it would be 500. I have added the Nortran trainees to that.

MR. BAYLY: You have added the

Nortran figures to that?

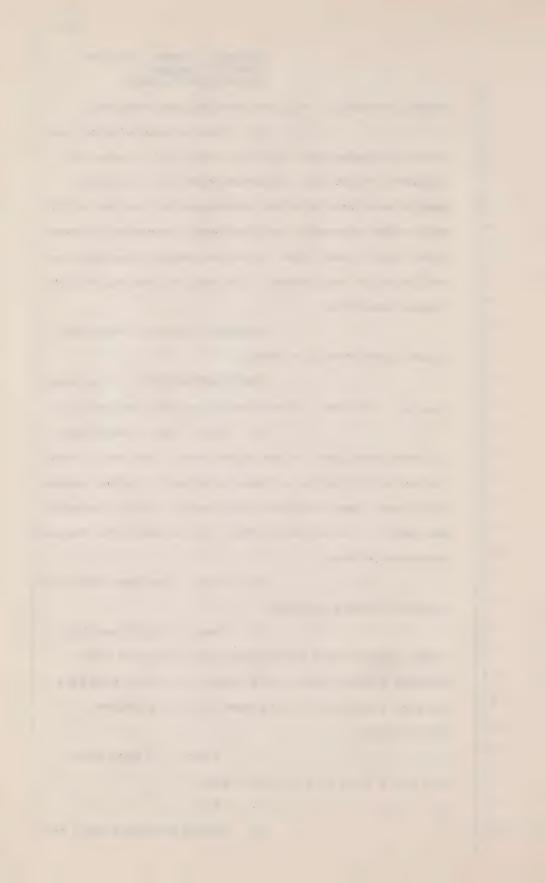
Nortran.

Yes. I would say that Α these people would be available for pipeline work because I don't think Hire North activities would be pursued vigorously at the same time as pipeline construction.

0 Right. If they were, you would have to cut that figure.

Yes.

These are the people that 0



Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Bayly

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be able to supply?

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A Yes.

are available for the kind of jobs you think you would

Q Now, on page ten, following

up on that, you talk about increased participation rates will occur due to increased exposure to wage employment and wage employment opportunities. Now we have heard evidence in Inuvik from Dr. Hobart which seems to be in contradiction to this. He cites the Gulf Coppermine experiment as being at least partly motivated by the fact that they didn't want to use delta employees who had been exposed to a great deal of employment and were not as responsive as they would like them. So they went to an area where they have not been exposed. Have you read his evidence?

A Well, I have seen most

O All right.

MR. HOLLINGWORTH: Can you

give us a page to that particular reference Mr. Bayly?

MR. BAYLY: No I can't

right now. The witness has said that he has read the evidence. Perhaps we can ask if he recalls that?

A No, I don't recall that

section.

of it.

Q All right. So where does your information that increased participation rates will occur due to increased exposure to wage employment and employment opportunities?

A Well I have made similar

Burrell, Jensen, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Bayly

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requests for data from the Terrace group in the
Territorial Government. Even though the quality of
this data is quite shakey, there are indications that
there is a greater level of participation now than there
was five years ago at the time the original manpower
survey was conducted.

Q Now, when you --

A It is also my understanding

that Gulf went to Coppermine because the people there seemed to be more stable and generally a higher proportion are married and therefore more stable than people in the delta -- Inuvik in particular.

Q All right, so you would be looking for stable people, not just people who are exposed to more jobs?

A I would expect stable people to be interested in longer duration employment.

Q All right. Would you therefore be looking outside the delta and Mackenzie Valley for these employees? I expect you may be for operations and maintenance because those are longer term jobs.

A I don't believe the applicant recognizes any responsibility toward people outside the corridor area but those people would be welcome.

 $\Omega$  You are not just there though to serve the needs of the people of the valley. You want to find stable employees, I suggest to you.



Burrell, Jensen, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Bayly

	Cross-Exam by Bayly
1	Q If you can't recruit
2	them from the valley you have to go elsewhere I
3	take it?
4	A Yes. But the closer they
5	live to the operations, the better it would be.
6	Q If you couldn't find them
7	in the valley, would you be looking for them in other
8	northern communities or would you start to look for the
9	in southern Canada?
0	A I think it would be
1	possible to look for them in other northern communities
12	Q Now, on page 22, in the
. 3	answer to question 36, you say that:
4	"Established northerners who were previously
1.5	unemployed and who obtained pipeline related
16	employment would be involved in both phases."
17	How would you propose to establish whether northerners
8	were previously unemployed? Would they be ones who
.9	were unemployed in the wage economy previously?
0.0	A Yes.
21	Q So they might involve
22	people who employed by themselves in other activities
23	subsistance activities for example?
24	A Well in that part of the
25	answer or what I am interested in is the incremental
26	change so covers also people who are might have
27	been underemployed.
8	Q It covers both categories.
29	A Both categories.
30	Q I assume it covers a third



Burrell, Jensen, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Bayly

category, those people who because of their age or because they were in school were not in the market.

A That's right.

Q Now, on page 26, you make a reference to the gas plant positions as being most prestigious and most desirable. Now, have you conducted surveys in the Mackenzie Valley and Delta to see whether in the perceptions of the people there these jobs that you refer to are the most prestigious and the most desirable?

A No, I haven't.

Q Where does that judgment

come from?

A A study on employment preferences was conducted a couple of years ago by DIAND. I can't recall if he made specific references to pipeline jobs, but there were jobs of similar categories.

Q All right. What were those jobs of the similar category?

A In general, as I recall, these were higher skill positions.

Q Say that again.

A They were higher skill

positions.

Q Higher single --

A Higher skill.

Ω Higher skilled positions.

So whether they can be transposed to the gas plant positions is something that you are making your own



judament on.

Burrell, <u>Jensen</u>, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Bayly

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A Yes. But what I concluded from that study that I did look at is that heavy equipment operation was considered more desirable than general labor work which didn't require any skills. Other positions requiring more skill than heavy equipment operator would be even more lucrative, more attractive.

Q Did this survey value the outdoor as opposed to the indoor occupations as being more or less valuable?

A I do not recall that.

 $\Omega$  Do you think that would

be a factor among northern native peoples in particular?

A Whatever the ethnic origin,
I think indoor employment might be more preferable when
winter weather is at its worst than something seasonal.

Ω Have you checked that yourself with any kind of survey?

A No official survey, just

observation.

Q All right. Have you asked the consultants that are on the panel for their opinions on that before writing this evidence?

A That has been discussed.

Yes.

Q Do any of the other panel members care to comment on why they think that these will be most prestigious and desirable jobs?

WITNESS JENSEN: Well, in

referring to our own observations and again to the Smith



Burrell, Jensen, Ellwood Devell MacLeod Cross-Exam by Bayly

O Miss Jensen, could you bring that microphone just a bit closer?

A One of the interesting things of that study was that northerners showed little preference for the categorically designated professional skills: lawyers, doctors, accountants, etc.

> I hardly blame them for 0

But it was skills --Α you know skilled professions. The people of the north can readily identify with like airline pilots was very high on the list of occupational preferences.

All right.

Α These are -- the jobs are relatively ones that were more or less community

Now, their community based 0 jobs -- is a gas plant operator's job a community based job?

At the present time, I don't that has been determined except in the initial stages, they expect to work a rotational system.

But they are jobs where a person who is an operator goes to the compressor station site. Isn't that correct?

A Yes.

0 Unless that happens to be in the community, would you call that community based or not?



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Burrell, <u>Jensen</u>, Ellwood Deyell, MacLeod Cross-Exam by Bayly

1 Well these jobs are going 2 to be in Inuvik, Norman Wells and Simpson. I would 3 expect that the largest number of people that -- northern-4 ers that are recruited into these -- will live in these 5 centers. 6 0 All right and in your 7 opinion are those the most desirable and prestigious 8 place to live? 9 A It's an individual choice. 10 0 I understand that. But 11 you are a person who obviously has been hired by Foothills 12 because you have some experience. Do people tell you 13 they would prefer to live in these centers than other 14 centers? 15 A I find that northern people 16 will move into the urban centers looking for employment. 17 Yes. 18 Do people tell you they 0 19 would prefer to live in these centers as opposed to 20 other centers. 21 Α Some have and some say 22 they prefer the smaller settlements but that similar 23 opportunities are not available. 24 Q Is it your opinion which 25 has been used by Mr. MacLeod with regard to these gas 26 plant jobs fitting into the airline pilot category as 27 being most desirable, most prestigious? 28 Α Yes. 29

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question 39 Mr. MacLeod, you state that:

On page 27, in answer to



Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Bayly

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"Some native prefer to work in camps well removed from their settlements."

Largely, I gather, because they can accumulate greater income because they are away from town and because they don't have the pressures to quit the jobs. Is that right?

WITNESS MacLEOD: That's right. Yes.

Q O.K. Have you taken into account that the community based jobs may not be available for everybody?

A Yes, I have taken that into

account.

Q Have you taken into account the fact that there may be lower pay scales in the community based jobs?

A Yes, I have.

Q Have you taken into account that these may be some of the reasons people go to the camp jobs as well as the ones that you state?

A Those are some of the

reasons. Yes.

Q When you came to the opinion that you came to in the answer to question 39, was it the result of a survey or was it an opinion formed from some other source?



Burrell, Jensen, Ellwood, Deyell, <u>MacLeod</u> Cross-Exam by Bayly

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1			A	It was an unofficial
2		survey.		
3			Q	Who did you survey?
4			A	Employees of labour
5		crews, primarily.		
6			Q	And were the labour crews
7		those hired by the oil cor	npani	es in the various out-
8		camps?		
9			A	No, these would be thes
10		were primarily local firms	S.	
11			Q	When you say local firms,
12		do you mean ones that		
13		100 100 1100	A	Based in Fort Simpson and
14		Inuvik, hired locally.		•
15		inaviny milou iounij.	0	Construction firms?
16			A	Yes, and site restoration
17		firms.	2.1	Too, and Side Internal
18		TIIMS.	Q	And so you left oil and
19		gas company employees out		
20		gas company employees out	A	Well, these firms
21		and the oil and man		
22		serviced the oil and gas		All right. Would you go
23		the same and same	Q	
24		to the camps and conduct		
25		duct them in the settlement from among the labour pool		
26	-	that would be available f		
27				It was among the labour
28		pool which was available	0	Was it as
29			re or	house to house interviews
30		How did you do that?	7	No it was suite



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for three years and --

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I wouldn't restrict it, A but I would say that it's much more applicable.

of the system.

casual. I mean, I lived there. I'd been living there

So it was -- you did 0 it by your own personal observations rather than a survey as we might understand it?

> Yes. A

On page 37, on the answer to question 50, there's a statement here in which you say that it is generally believed that many native northerners have left the north over the years because of inadequate employment opportunities, now we had some evidence fairly recently from Mr. Brody and Dr. Usher and I don't know if you've had an opportunity to look at that evidence but one of the comments made by Mr. Brody was that in contrast to other areas where there aren't a great deal of jobs, people don't leave the north in great numbers, if you compare it to the Maritimes, for example.

A Well, I'd like to make a distinction there between, let's say the Inuvik end of the river and the southern end. I think people in the delta and points north are less likely to go south than people at the other end of the river.

So, this statement should Q be restricted to the people up river, at the south end

> Yes. Well, you've said that Q

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many native northerners have left the north and the impression that I got from other witnesses was that not many native northerners had left the north, particularly at the north end, as you've stated.

 $$\rm A$$   $$\rm Well, \ I \ say \ very \ few$  people from the north end have left the north.

Q Yes. And when you say leave the north, you mean on a permanent basis?

A They seem to leave and come back.

Q Say again?

A These people who leave the north, eventually do return in many cases.

Q So, you're including in people who leave the north, people who leave and come back?

A Yes.

Q Well, how long do they have to have left before they fit into this category of people who leave the north?

A I don't know, I think I might even consider Nortran trainees as being people who leave the north because of lack of opportunity in the north, and they do return once opportunities do present themselves.

Q So, you'd include them and you'd include people who went to other educational institutions to acquire skills as people who've left the north?



Ly

1	Q Even though they may be
2	enrolled in a programme like Nortran which is specifical
3	designed with the hopes that they will come back to the
4	north with the skill?
5	A But they're not required
6	to come back, they have the option to return, yes.
7	Q I understand that, but
8	you've included them in these people who leave the north
9	A Yes I have, yes.
10	Q Page 39, you refer to
11	southern hiring halls in the last paragraph, and you've
12	stated that that's one of the things that will keep a
13	large number of southerners from coming to the north
14	on speculation.
15	A Yes.
16	Q And you've stated a littl
17	higher up on the page that there's no road link to the
18	south at least no farther up than Fort Simpson or
19	Fort Wrigley and you've said that will also be a
20	deterent.
21	A Yes.
22	Q Now, have you checked
23	with the Alaska experience in order to determine how
24	many people came by way of the Alaska highway and how
25	many came by boat or by airplane?
26	A I've seen the figures. I
27	recall several hundred percent increase in highway
28	traffic.
29	Q Several hundred percent

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increase.



	.4	ss-Exam by Bayly
	A	Yes.
	Q	And how does that correspond
to the percentage of p	people th	hat came by road as
opposed to other modes	of trav	vel?
	A	I'm not sure, I didn't
make such a comparisor	1.	
	Q	All right, so all you
can tell us is that mo	ore peop:	le used the highway during
the period that lead t	o'invol	ved construction?
	A	Yes. It's my impression
that the highway was t	he main	means of transportation.
	Q	Yes, and you've stated
that a \$200.00 plane t	icket wi	ill deter some people
from coming on specula	tion as	well.
	A	Yes.
	Q	I take it that you don't
think that these thing	s will h	oe exhaustive but there
will still be some peo	ple who	will come on speculation?
	A	That's right, I would
expect some.		
	Q	How would you propose
to deter people who ar		
	Α	Yes, I think that would
		ough an information pro-
		lack of facilities in the
	ty to go	o through hiring halls in
the south.	0	Come back to page 27 and
your anguer to guestic	Q vn 51 3	Come back to page 37 and You state there that the
vour answer to questic	/11 Jin 1	ou state there that the

impact of the operations phase will be greater on public and private services than the construction phase. Now, as I understand from witnesses that come from Alaska, the impact on public and private services during construction itself was particularly severe. Businesses were turned over and were taken over by bigger concerns. How do you propose to insulate, if at all, northern businessmen from this kind of experience?

A What, from selling out?

Q Yes. You see, they're if

waiting for the opportunity and/the Alaskan situation is a parallel at all, it seems that some of the people there were forced to sell out even though they may have been waiting as well.

MR. HOLLINGWORTH: I'm sorry

Mr. Bayly, even though what?

MR. BAYLY: They may have been

waiting as well.

A I think -- it's my impression that local business is trying to hold on as long as possible, survive as long as possible in order to be in a position to capitalize on the business opportunities generated by the pipeline.



Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by Bayly

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29 30 Q Is it your opinion that businesses that hang on as long as possible will be in a position to generate enough capital to participate in the servicing of your project?

A Yes, it's my understanding that there's enough credit available in the study region to finance adequate capacity expansion. All you need is a good project or a good proposal to propose to the bank. If you can do that, the credit's there. Right now credit would be difficult to obtain because most businesses do not have a viable project to propose. But if they did, the money is there.

Q And that, you feel, is for existing businesses who may at this point stretch their credit to its limit.

A Yes.

Q Have you discussed this

with the banks?

A Yes, I have.

Q And they're prepared to do that, at least in a general way? Or to give you that assurance in a general way?

A The banks right now are very reluctant to finance, because a lot of businesses could fold if development is delayed much longer. But if these same businesses came and proposed some concrete opportunity, business opportunity to a bank I don't think they'd have too much difficulty in obtaining funds. If they are turned down by the bank, equipment purchase is extremely easy through acceptance companies.



## Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by Bayly

The interest rates are higher, but if you want to buy a truck and you have a job for it, you have no trouble getting the cash in two or three days, no matter what your past experience has been, really.

Q That's going to put the prices of those services up, I take it, if a trucker, to use your example, is paying very high interest rates be'll have to charge higher rates for his truck than he would if he could get bank financing.

A Yes, but in general I say that bank credit is fairly easy to obtain if you have a viable project proposed, and I have made a study of interest rates in the impact area and they are not out of line with interest rates being charged in southern Canada.

 $$\tt Q$$  Unless you have to go to the acceptance --

A Acceptance companies, yes.

Q I'm going back to page

36, you state:

"The ethnic balance in the smaller settlements should not be affected,"

and yet you've referred to people moving to the larger centres. Miss Jensen has just referred to people who may in the operations and maintenance phase particularly be centred in Norman Wells, Simpson and INuvik. Now, and I asked this question of the Arctic Gas witnesses, what sorts of impacts you anticipate on those people who will be left behind in the smaller communities, both in construction when a lot of workers are away at



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## Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by Bayly

1	camp who would otherwise be community leaders, and
2	when people leave to take the operations and maintenance
3	jobs. Who is going to fill the vacuum?
4	A Well, it may not be
5	filled.
6	Q All right. I understand
7	the experience is sometimes that it is filled by people
8	who come up on a speculation basis, who have been to
9	a smaller settlement.
10	A Now are you thinking of
1	businessmen?
.2	Q Yes.
. 3	A I don't think there's any
4	reason for a businessman operating in a smaller
.5	settlement to pull out.
.6	Q I'm not suggesting there
7	is. I'm suggesting
8	A That is leaving and going
9	into a larger community, there's no reason for that
0	at all.
1	Q I'm suggesting the
2	opposite, that people may go into the smaller communitie
3	because those people who normally do the jobs and take
4	the contracts may have gone on the pipeline.
5	A Well, in virtually every
6	community now you have a general contractor, and he's
7	the one in the best position to take advantage of
8	business opportunities in his area. There's no reason

for him to leave, so I don't see why a vacuum in that

area should be created.

Burrell, Jensen, Ellwood, MacLeod, Devell Cross-Exam by Bayly Cross-Exam by Sigler You don't think you'll

be attracting him and his work?

3 4

A I don't -- for example, I don't see any reason for a general contractor in

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operate out of McPherson, so there won't be a vacuum

McPherson to go to Inuvik to get work. He can still

As for outsiders coming in to establish a

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business, they're more likely to go into the larger

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MR. BAYLY: Perhaps Mr. Holling-

11 12 worth could advise me if I should save my questions on the manpower delivery system until the other two witnesses

settlements because living conditions are more condusive.

13 arrive?

MR. HOLLINGWORTH: Will you

15 answer that?

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WITNESS BURRELL: I spoke to

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the manpower delivery system, Mr. Kosten, whose evidence deals with the construction phase, and that's the area

19 20 that we were wanting to defer.

MR. BAYLY: All right, the

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questions that I have are largely on the construction

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portion, and if I'm to save those, Mr. Commissioner, for

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Mr. Kosten, I'm prepared to do so. Those are all the

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questions I have of these members of the panel.

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MR. GOUDGE: Mr. Sigler?

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CROSS-EXAMINATION BY MR. SIGLER:

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Mr. MacLeod, on page 32 0

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of the evidence, question 43 in your answer, your

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last sentence is:



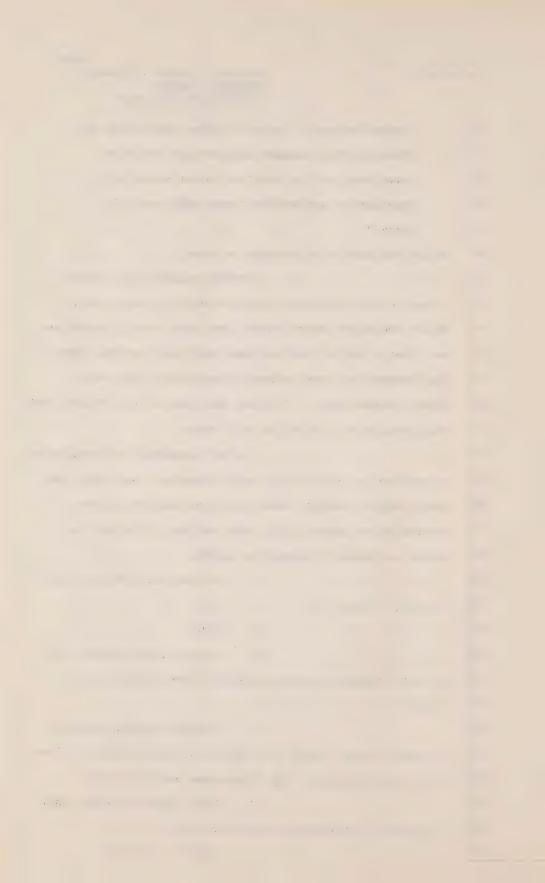
Burrell, Jensen, Ellwood, MacLeod, Devell

	Cross-Exam by Sigler
1	"Nevertheless, I note that the population of
2	Inuvik, Fort Simpson and perhaps Hay River
3	have declined in absolute terms since my
4	population projections were made early in
5	1975."
6	Would you care to elaborate on that?
7	WITNESS MACLEOD: All right,
8	I was in Fort Simpson last year doing a survey and
9	spent about two weeks there, and what really struck me
10	was that a lot of mobile homes had been removed from
11	the community, just packed up and left, they were
12	recent departures. I think that was an indication that
13	the population had fallen off there.
14	I also discussed the population
15	situation in Inuvik with Mayor Robertson and last year
16	many people thought there was a population in the
17	community of about 4,000; the feeling right now is
18	there is probably closer to 2,000.
19	Q So you are familiar with
20	Inuvik, I take it.
21	A Yes.
22	Q You've lived there. You
23	say the population has decreased from 4,000 down to
24	2,000?
25	A I don't really believe
26	it ever was at 4,000, but that was the impression given
27	by a lot of people. My figure was around 3.300.

it was at 3,300 when, a year ago or --About a year ago. A

Q

Your impression was that



Burrell,	Jensen,	Ellwood,
MacLeod,	Deyell	
Cross-Exa	am by Si	gler

1 Q And it's dropped now to 2 2,000? 3 To about 2,000. But A 4 there are still people this year who think there's 4,000 5 I think the Territorial Government think there's 4,000 6 -- that may be tourist pressures. 7 Well, we better not tell 8 them otherwise. 9 There is no official 10 figure, I don't think. 11 THE COMMISSIONER: Well, that's 12 good so everyone can come to their own. 13 That's the way it works 14 right now. 15 MR. SIGLER: O Well, what 16 about Simpson, are you able to give any numbers as 17 to the decline there that you'd estimate? 18 No, I can't give a definite Α 19 figure. 20 0 What about Hay River? 21 Α I don't have a definite 22 figure there either. It's just from observation. These 23 observations are based primarily on vacant living 24 quarters. 25 What reason would you 0 26 give for the decline? Are you able to give a reason? 27 A It's the postponement of

Q

What kind of development?

29 301

development, primarily.

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Burrell, Jensen, Ellwood. MacLeod, Deyell, Cross-Exam by Sigler

Are you talking about the pipeline, or a pipeline? 1 2 A Yes. 3 Q And when you made the statement, I think in answer to Mr. Bayly, that businesses 4 could fold if there's no development, you're talking 5 there about businesses that could fold if there's no 6 pipeline? 7 That's right. 8 There seems to be an insufficient volume of business 9 right now to keep a lot of these businesses in operation 10 indefinitely. 11 12 0 And what communities are you talking about there? 13 14 It's the main communities. Inuvik, Norman Wells, Simpson and Hay River to a lesser 15 16 extent. 17 0 Have you noticed any --18 could you observe or made any observations about businesses that have actually folded to date because of there 19 20 being no development? 21 A There weren't many business failures back in '75. I can see a lot of trouble 22 23 right now. I can see some failures almost inevitable 24 in the very foreseeable future. 25 0 What scenario would you 26 paint of a continuing picture of a situation of no 27 development taking place that would affect, say, Inuvik? What would the scenario be for the Town of 28 29 Inuvik, in your opinion, if there was no decision made

r start rz, B.C.

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in favor of development?



Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Sigler

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A The population would continue to fall off. Businesses will continue to pull out. I know quite a few businesses now are in a very precarious financial position.

THE COMMISSIONER: Well, Mr.

MacLeod, let me put it this way: These businesses that are in a holding pattern, if all of this, if their future is dependent on a pipeline being built now. and of course since the INquiry was established we have been told that there are any number of businesses in the north in a holding pattern whose future depends on the pipeline being built now, that has been the refrain for something like two years. Now, this Inquiry is anxious to get its report into the government by the end of the year. There is, we are told in news reports and that's all I have to go on, that the National Energy Board will not complete its hearings until next spring and its report may not be available to the government until later in the year. Then the government may wish to take some time to consider the Well -- and of course, the government may in the final analysis decide that it is not going to build the pipeline. But let us assume that a decision by the government is not immanent and that is what one must assume if the regulatory procedures established by Parliament or the National Energy Board Act are going to be carried out. What is the future for all of these businesses that are in a holding pattern now? Do you just see what I'm getting at? We've been told



Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Sigler

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this now for two years, and a decision is still many months away --

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A Yes.

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decision

/made according to the law of the country as it stands

now, which requires that the National Energy Board shall

hold hearings and grant a certificate. It may decide

to grant a certificate, it may not.

8

A M-hm.

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Q You see, all of these

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people have proceeded on the assumption that the National Energy Board would inevitably grant a certificate of

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public convenience and necessity; but under the National Energy Board Act there is no requirement that they do

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so; and in any event, if they grant a certificate the

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government can then review it and decide to uphold it

18

or to not to proceed. But all of these failures that

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you see occurring immanently, what are their prospects?

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Can they hold on till the decision-making process is

21

completed?

A Most of these businesses

23

came into existence between say 1970 to '73, and they

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have already operated at very high levels of activity

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because of the high level of exploration work going on in the first half of the decade. So it's not necessary

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that construction start on the pipeline tomorrow to keep

positive as to maintain drilling activity, and preferably

these businesses alive. What is necessary is that the

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prospects for pipeline construction remain sufficiently

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Burrell, Jensen, Ellwood MacLeod, Devell Cross-Exam by Sigler

You're talking about

Yes, you're saying that

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increase it to say 1974 levels at least.

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businesses in Inuvik and the delta then?

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A Yes. and these businesses have done very well in the last five years without a pipeline; but this favorable activity has been based on the prospects of a pipeline. So those prospects

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29 30 have to be kept alive, sufficiently alive to justify --

you're really telling us that the oil and gas industry and they've announced this, I think the president of Imperial Oil was in Yellowknife recently to say so in as many words that unless the government gives the goahead to the pipeline, there will be a falling off of oil and gas activity in the delta and the Beaufort Sea. That's really -- you're saying that these business failures you foresee would be the fallout from that whole thing. That's essentially the picture.

Yes, if drilling ceases, Α these businesses will definitely fail. Last summer would have been a disaster in Inuvik had it not been for the one million dollar expansion -- expenditure program for the Town of Inuvik, because there was no other work around.

0 Well, the Town of Inuvik kept those businesses alive --

> Α Yes.

-- with public expenditures. 0

Now that \$1 million Α Yes.



Burrell, Jensen, Ellwood <u>MacLeod</u>, Deyell Cross-Exam by Sigler

expenditure was based on developments, the prospects of developments. It seems possible that the Town of Inuvik has over-extended itself because of it.

So this year we don't have very much of a public expenditure program in Inuvik.

On the other hand, Dome is doing work in the area.

Q Yes. You see, Dome has been given the go-ahead for something like 16 wells to be drilled over five years, pipeline or no pipeline. That presumably would fill the role that Inuvik had to step in and fill last year to keep those businesses alive. Is that a reasonable assumption?

A Yes, except the Dome program is much more limited in time. The drilling season is short and it's done on ships, requires less manpower than work which would be undertaken --



But you are talking about

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business failures, not a lack of employment opportunities except as a function of business failures. You're just considering the plight of those businessmen and their businesses for the moment without going back into the whole question of economic impact and employment , throughout opportunities the delta which I think we have discussed at length. I certainly had the feeling we had gone into it.

A whole mind set was established in the delta on the assumption that a pipeline would be built, when the National Energy Board Act throughout provided that a certificate of publice convenience of necessity had to be granted. When the Territorial Lands Act provided that a right-of-way had to be granted, that expectations were raised notwithstanding -- and spokesman for the Government of Canada did a good deal to raise those expectations.

This atmosphere was created notwithstanding the fact that the law provided that the plans for pipelines had to be subjected to the most rigorous examination before a statutory tribunal.

Well, anyway, it's 4:30. When are we supposed to end. Is 4:30 our closing time?

MR. GOUDGE: It is about 25 to five sir.

THE COMMISSIONER: Do we end at

MR. GOUDGE: Well,

how much

longer. We --

4:30 or 5:00?



1	Burrell, Jensen, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Sigler		
2	THE COMMISSIONER: How		
3	much longer will you be? I am finished. I have no		
4	questions.		
	MR. SIGLER: Now for my second		
5	question. No, I might be another 15 minutes.		
6	MR. GOUDGE: Perhaps we could		
7	do that and then stop for today sir, if that suits you.		
8	THE COMMISSIONER: O.K. Well is		
9	that all right with you. Just carry on.		
10	MR. SIGLER: So your evidence		
11	Mr. MacLeod is that without the prospects of a pipeline		
12	that the population would decrease dramatically in		
13	Inuvik?		
14	A Yes.		
15	Q Does the same apply to		
16	Hay River and Simpson?		
17	A Yes but I think much of		
18	this decrease has already taken place.		
19			
20	Q It already has taken place?		
21	A Yes. In Inuvik and Fort		
22	Simpson.		
23	THE COMMISSIONER: Mythical 4,000		
24	to 2,000?		
25	A Yes.		
26	MR. SIGLER: And the actual		
27	3300 to 2,000.		
28	A I think at one point there		
29	actually was a population of 4,000 in Inuvik. That's		
3 ^	around '73, '74. A year ago, it was probably 3,200, 3,300		



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Now it's closer to 2,000.

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THE COMMISSIONER: So the fallout in population certainly in Inuvik has by and large occurred.

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that.

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A don't I think there was any use at all of local contractors.

There wasn't much use--

A Yes, but right now, we

are at a seasonal low because school is out. In the fall some people will return with children. So you might go back up to 2,500. Then it will start to fall off again from 2,500.

0 Yes, but those fluctuations occur pipeline or no pipeline?

A Yes. So when I say it's 2,000 right at this time, that might be an overexaggeration of the fall off.

The slowdown in the construction of the Mackenzie highway was surely responsible to a greater extent than any falloff in oil and gas exploration activity for a decline in population in Simpson. Wouldn't that be so, or would you not agree with that?

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No, I wouldn't agree with A

0 You wouldn't?

Yes.

Α No because that project

used mainly Hire North, was a Hire North project and almost everyone involved in it was native and local.



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The number of jobs in the Fort Simpson area may have declined because of the closing down of highway construction but all of the people are still there. There was no decline in population because it was native people who were employed on the Hire North project?

A Until about two years ago, there was much more exploration taking place in that area and that has fallen off.

0 But is there any reason that you can assign to the falling off in the exploration activity in the Fort Simpson area. Is is anything to do with the pipeline prospects or did it have more to do with the results themselves of exploration?

Α I think that the two factors were involved. Some businesses were established to take advantage of pipeline opportunities and since these opportunities did not materialize, these businesses folded.

> 0 That has occurred?

A That has occurred. The Simpson business community is particularly unhealthy at So I would say probably the worst is over in

> 0 Yes.

Such is not the case in

Inuvik.

Simpson.

this time.

0 Yes, sorry. Go ahead. MR. SIGLER: My third question, sir.



Mr. MacLeod

Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Sigler

THE COMMISSIONER:

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is good enough to stick his neck out and try to tell us what the picture is and I appreciate it.

MR. SIGLER: Would you say that say for Inuvik -- sticking with the Inuvik example -that the population decrease -- the people that there in the prospects of a pipeline have already left and the population has declined?

> Α Some have left.

0 The main part of the decline

has already occurred you say?

A The big contractors have not pulled out yet. The big long established contractors. They are still hanging on.

0 Well what would your -let's say that the decision to build a pipeline is not forthcoming -- not a year from now but not say for the next five years, what picture would you paint for Inuvik's population? Would it continue to decline beyond what it is now?

> Α Yes. Definitely, yes.

What would you see the

You

rock bottom being as the basic core of Inuvik that would there be even without any prospects?

Well, as I said earlier, A right now it might be around 2,000 but that should be adjusted upwards to reflect the return of students in a month or so.

THE COMMISSIONER: count the students that come in from the other villages to go



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to high school there as part of the permanent population?

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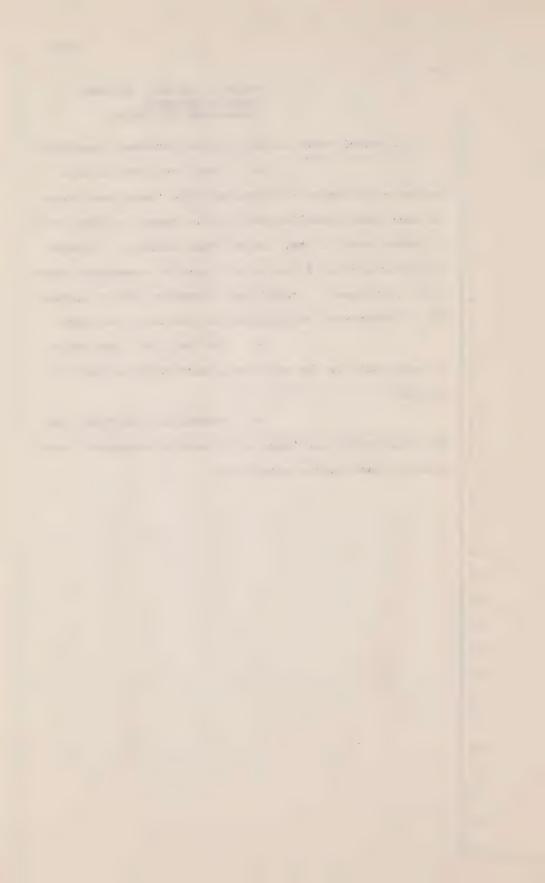
Yes, but there is also people -- you know -- whites who live there year round who send their families out for the summer so they would be coming back if they are not back already. So maybe we should look at a realistic figure of somewhere around 2,500 right now. I could see it backing off by another

700 if there were no pipeline for another five years. So the 1,800 that would Q

be left would be the solid base that would be left of Inuvik?

> Α Something like that, yes.

You would have your fixed civil service component there plus the base native population.



Q And would you be able to give a similar analasis of either Fort Simpson or Hay River? Either specific ones or general when you're looking at figures?

A I would suspect that Fort Simpson is pretty close to rock bottom now. I have less information on Hay River.

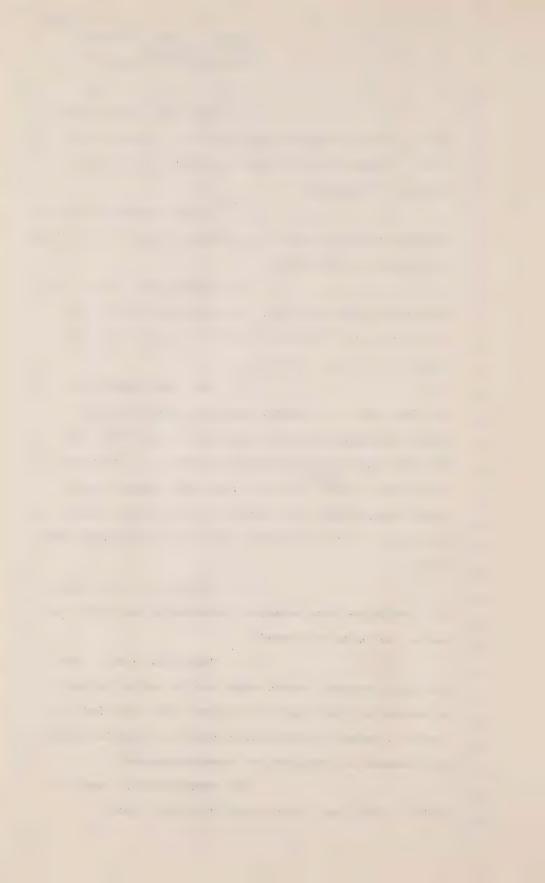
THE COMMISSIONER: Hay River presumably would be less. The business activity in Hay River would fluctuate somewhat less than in those other two places. Is that --

A Yes, well certainly a lot less than in Simpson, because right now there is some hydrocarbon activity going on in the delta and Hay River does profit from this because of its barging while facilities, so/at the same time Fort Simpson is bypassed completely, Fort Simpson is not really taking advantage -- it's not really involved in anything right now.

Q So you'd say Hay River is profiting from whatever exploration activity that would be going on around.

A Right now even. But curiously enough, Inuvik might not be taking as much advantage of that kind of activity right now that it used to, because barges quite often go right by Inuvik now instead of stopping for trans-shipments.

THE COMMISSIONER: Sorry, I didn't catch that, do you want to repeat that?



Ms.

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concerned?

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A Yes.

THE COMMISSIONER:

Jensen, do you agree essentially with what Mr. MacLeod says about the economic picture in Inuvik, given these various scenarios? Do you dispute anything Mr. MacLeod has said?

Foothills employment policies would be successful as

far as they relate to hiring local people, especially

native people and also as far as the camp policy is

WITNESS JENSEN: No, and recent observations and discussions in Inuvik indicate that there are quite a few people who have left and other people are seriously considering it depending on a decision.

MR. SIGLER: Now, Mr. MacLeod, on page 35, at the bottom, you state that most of the population increase would be concentrated in Inuvik, Norman Wells and Fort Simpson. I note you have specifically have not included Hay River. Why don't you foresee a concentration of population increase in Hay River?

WITNESS MacLEOD: Well, there's

no operations and maintenance facilities planned for Hay River.

Q And you're talking on the operations phase mainly in your projections.

A At that point, yes, I think so. Yes, that's correct.

Q Would that same be true to the construction phase?



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phase we'll expect a temporary population increase, connected with the barge traffic, but it's only an increase in relation to current level of activity, it wouldn't be an increase in relation to, let's say, 1973 level of activity. It's my understanding that at about two years ago, barge traffic was pretty heavy so we could see a return to that kind of a level, but not a substantial increase over that level.

Q That's once again, you're talking of the Foothills application.

A Yes.

Q The Foothills proposal

going ahead, when you're saying that?

A Yes.

Q Do Foothills have any

plans for Axe Point?

WITNESS ELLWOOD: Yes we do.

Mr. Kosten will speak to that when he returns, if you wish.

Q Now, on page -- on page 36, Mr. MacLeod, I refer you to the same sentence that Mr. Bayly referred you to. "On the other hand, ethnic balance within the smaller settlements should not be affected significantly." I take it that's a prediction there, not a value judgement?

WITNESS MacLEOD: It's a

prediction, yes.

Q Also a value judgement?
A Well, the idea is that



· )

someone who's been living in Calgary all his life and is accustomed to you know, the amenities in such a place, is not too likely to move into any of these small native communities with no running water and so on. So really, in a sense, it's a prediction of other persons value judgements.

Q On page 38 and 39, you draw in the Alaskan experience then you make distinctions because of Inuvik not having the road link to the south. What do you say about this -- these differences, surely you cannot make for Hay River and Fort Simpson which are on the highway.

A That's right.

Q Mr. MacLeod, I also --

when you gave evidence on the first panel, you undertook

I believe, to provide figures on the money spent by the

Federal Government in the Northwest Territories other

than the -- on the Territorial Government.

I wonder if you had been able to get those figures yet

or if you would undertake to provide them?

A Yes, what happened was, about a month and a half ago, I sent an order in to Information Canada to pick up a publication which I thought might contain information I wanted. My order was returned because Information Canada was out of business.

So, when I was asked that question a couple of weeks ago on panel one, I suggested that the information wasn't available, well, I just received it and it's contained in the publication called



"The Annual Northern Expenditure Plan, 1975-'76", put out by Indian Affairs, I believe.

- /



Burrell, Jensen, Ellwood, MacLeod, Deyell Cross-Exam by Sigler

Q You'll provide that too?

A No, it's a public document.

Q O.K., Mr. Burrell, on page

75 you speak of -- starting at your answer to question 91 at the top of page 75:

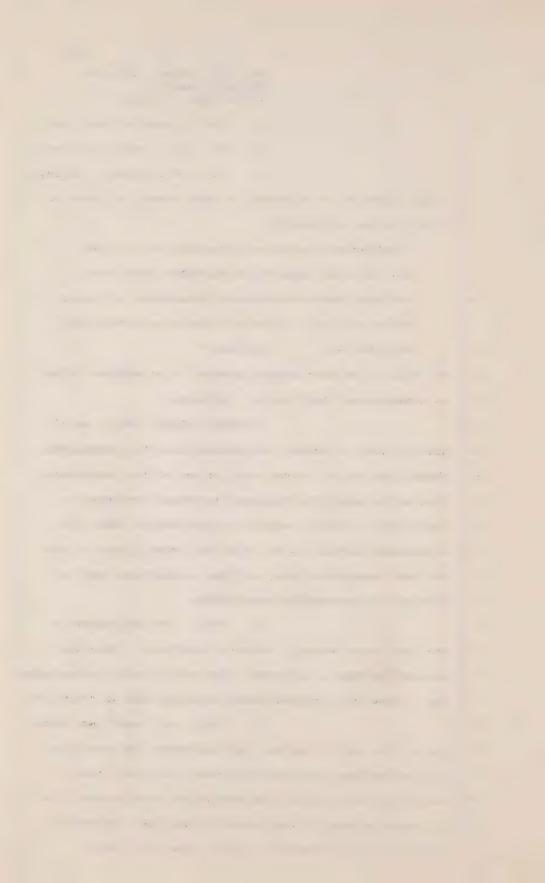
"Contractors and sub-contractors on a project will also be required to purchase from local northern business wherever practical, and where there will be no adverse effects on communities, supplies or services."

Who will it be that determines what is an adverse effect on communities' supplies or services?

WITNESS BURRELL: Well, we'll have to have of course discussions with the communities themselves and of course this is one of the assignments that we've asked the Business Opportunities Board to look into. So it's a matter of discussions among the interested parties to see what the capabilities of the various communities are, and the contractors, and to develop our purchasing accordingly.

Q Well, I'm interested in how this would actually work in practice. Will you expound on that a bit more? How would Foothills encompasses -- how this program would actually work in practice?

A Well, as I said, we intend to -- this is, of course, one assignment we have given to the Business Opportunities Board, and what their work there will be will determine the ongoing work that is normally done in the community and the contractors that are in the community at the time, and their



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Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Sigler

capabilities, and then they'll be recommending to us what these contractors are capable of doing within -- and also what requirements are needed in the communities. Then it will be a case of discussions with the communities themselves and the contractors to be sure that the contractors and the businessmen get an opportunity to take advantages of the opportunities, b ut that the communities themselves are protected. It's a matter of -- it's one of the many things that will have to be discussed in detail with the various communities.

Q You're not saying that this Business Opportunities Board that Foothills has set up will make these decisions?

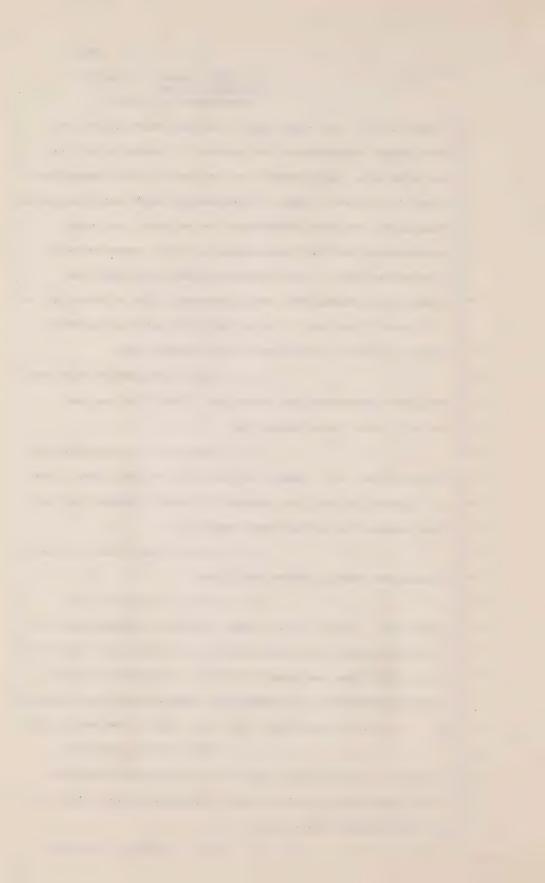
A They will be providing us with advice, but I think the decision on this has to be in discussion with the community leaders themselves and the contractors within the community.

Q But you don't see Foothills themselves making these decisions.

A We'd be party to the decision. I think it's a case of having discussions, as I said before, with the community and with the contractors to be sure that we aren't draining resources from the communities that the communities themselves could utilize. So it will be something that will have to be worked out.

effects on communities supplies or services that you were referring to? What kind of adverse effects could there be on community services?

What are the adverse



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## Burrell, Jensen, Ellwood MacLeod, Devell Cross-Exam by Sigler

of groceries is an example, or tires or whatever, says "I want to supply all the tires or all the groceries." and we went in and reached that agreement with him and we drained the community of supplies of that nature. We certainly wouldn't want to do that, and that's just one example. There are many others, I'm certain.

Another thing, of course, is draining contractors away that could normally provide the municipal services, the communities would want to maintain those services with the highest level of efficiency possible. So it's a matter of negotiation discussions with the communities themselves.

Now, the only other question I have for you is, call the Phase I evidence you undertook to provide some information for us, namely the money that would be required to get gas to all the communities, more than \$25 communities --

> A Yes.

-- and the downstream effect on the 12¢ figure of supplying gas to all communities. I wonder how close you are to providing us with those figures?

A We're in the process of developing a response now. I would think that -- I was just looking at the Inquiry time-table, and there are no sittings the last week in August, and I wonder if the date of September 7th, which is the first day the hearings reconvene, if that would be an acceptable date?

MR. SIGLER: Very good for our

purposes. Those are all the questions I have of this

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Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Sigler

1 panel. sir. 2 THE COMMISSIONER: O.K., well 3 then let's adjourn until tomorrow morning at ten A.M. 4 and I would think we'll complete the examination of 5 this panel without delay. 6 What is the next item of 7 business after this panel? 8 MR. GOUDGE: Just to schedule 9 the week quickly, sir, we'd anticipate concluding cross-10 examination of this panel tomorrow morning and we'd then 11 move on to evidence called by Commission counsel, Dr. Mim Dixon. We've distributed her evidence and just 12 13 distributed three reports that she'll be relying on, 14 although her evidence was distributed last week. 15 Following that we'll have three 16 witnesses presented by Mr. Bayly, and that should take us 17 to Wednesday evening, and then the Association of 18 Municipalities has a panel basically the Stanley & 19 Associates Report, as I understand it, which will take 20 up the balance of the week, and with some time for Mr. 21 Blair's speech on Friday. 22 THE COMMISSIONER: O.K., fine. 23 (PROCEEDINGS ADJOURNED TO AUGUST 17, 1976) 24 25 26

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Mackenzie Valley pipeline inquiry:

August 16, 1976 Yellowknife

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## MACKENZIE VALLEY PIPELINE INQUIRY



IN THE MATTER OF APPLICATIONS BY EACH OF

- (a) CANADIAN ARCTIC GAS PIPELINE LIMITED FOR A RIGHT-OF-WAY THAT MIGHT BE GRANTED ACROSS CROWN LANDS WITHIN THE YUKON TERRITORY AND THE NORTHWEST TERRITORIES, and
- (b) FOOTHILLS PIPE LINES LTD. FOR A RIGHT-OF-WAY THAT MIGHT BE GRANTED ACROSS CROWN LANDS
  WITHIN THE NORTHWEST TERRITORIES
  FOR THE PURPOSE OF A PROPOSED MACKENZIE VALLEY PIPELINE

and

IN THE MATTER OF THE SOCIAL, ENVIRONMENTAL AND ECONOMIC IMPACT REGIONALLY OF THE CONSTRUCTION, OPERATION AND SUBSEQUENT ABANDONMENT OF THE ABOVE PROPOSED PIPELINE

(Before the Honourable Mr. Justice Berger, Commissioner)

Yellowknife, N.W.T.

August 17, 1976.

PROCEEDINGS AT INQUIRY

Volume 171



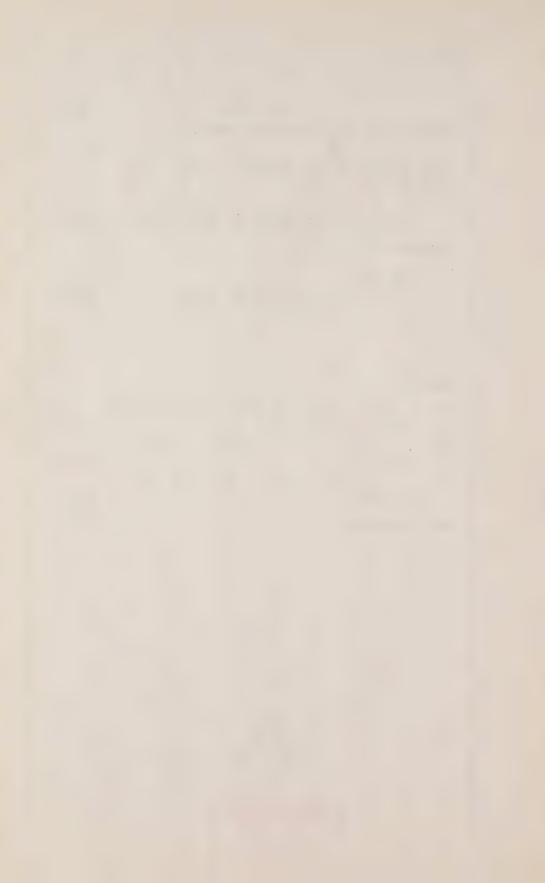


1	APPEARANCES:
2	Mr. Ian G. Scott, Q.C., Mr. Stephen T. Goudge,
3	Mr. Alick Ryder, and
4	Mr. Ian Roland, for Mackenzie Valley Pipeline Inquiry;
5	Mr. Pierre Genest, Q.C.,
6	Mr. Jack Marshall, Mr. Darryl Carter, and
7	Mr. J.T. Steeves, for Canadian Arctic Gas Pipe- line Limited;
8	Mr. Reginald Gibbs, Q.C., Mr. Alan Hollingworth, and
9	Mr. John W. Lutes, for Foothills Pipe Lines Ltd.;
10	Mr. Russell Anthony, Prof. Alastair Lucas and
11	Mr. Garth Evans, for Canadian Arctic Resources Committee;
12	Mr. Glen W. Bell and
13	Mr. Gerry Sutton, for Northwest Territories Indian Brotherhood, and
14	Metis Association of the Northwest Territories;
15	Mr. John Bayly and Miss <sub>Lesley</sub> Lane, for Inuit Tapirisat of Canada, and The Committee for
17:	Original Peoples Entitle- ment;
18	Mr. Ron Veale and
19	Mr. Allen Lueck, for The Council for the Yukon Indians;
20	Mr. Carson Templeton, for Environment Protection
21	Board;
2.2	Mr. David H. Searle, Q.C. for Northwest Territories
23	Chamber of Commerce;
24	Mr. Murray Sigler and for The Association of Munici- Mr. David Reesor, palities;
25	
26	Mr. John Ballem, Q.C., for Producer Companies (Imperial Shell & Gulf);
27	Mrs. Joanne MacQuarrie, for Mental Health Association
28	of the Northwest Territor- ies.
29	



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Yellowknife, N.W.T.

2 August 17, 1976. (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT) 3 4 THE COMMISSIONER: Well, shall we come to order and begin? 5 6 MR. GOUDGE: Yes sir, we're 7 prepared to proceed. Mr. Bayly indicated he had one or 8 two things to do before we begin. 9 MR. HOLLINGWORTH: Mr. Commissioner perhaps before Mr. Bayly proceeds, I could take care of 10 11 a couple of housekeeping matters. 12 First, I'm filing the Biological Field Program Report for 1975 prepared by the Lombard 13 14 North Group Limited for Foothills Pipe Lines. are four volumes I'd like to file with the Inquiry. 15 16 Secondly, sir, I've made mention before various changes in the construction program of 17 18 Foothills that have been mooted, and I have a filing here, 19 sir, I'd like to file with the Inquiry that has replace-20 ment pages for the original Part III volume of the 21 application that was filed on May of 1975. 22 MR. BAYLY: Is that your final 23 housekeeping matter, Mr. Hollingworth? 24 MR. HOLLINGWORTH: That's it. 25 thank you. 26 MR. BAYLY: I have one similar 27 matter, Mr. Commissioner, I undertook during the evidence 28 given by Dr. Usher in his last appearance to file the 29 hunting rights brief which is a supporting document to Nunavut proposal, and I have that document and



intent, yes.

Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

1	I will give it to Miss Hutchinson to be marked as an		
2	exhibit.		
3	(4 Volumes BIOLOGICAL FIELD PROGRAM REPORT, 1975,		
4	BY LOMBARD NORTH MARKED EXHIBIT 685)		
5	(REVISED PART III OF FOOTHILLS CONSTRUCTION PLAN		
6	MARKED EXHIBIT 686)		
7	(INUIT HUNTING RIGHTS IN THE N.W.T. BY P.J. USHER		
8	MARKED EXHIBIT 687)		
9	MR. GOUDGE: If we can begin		
10	again, I have a few questions for this panel.		
11			
12	JOHN KEITH BURRELL		
13	MISS MAUREEN ELAINE JENSEN		
14	JOHN RUSSELL ELLWOOD		
15	JOHN B. MACLEOD		
16	WILLIAM J. DEYELL, resumed:		
17	CROSS-EXAMINATION BY MR. GOUDGE:		
18	Q Mr. Burrell, if I could		
19	begin with you, if I could, please, and ask you to turn		
20	to page 4 of your prepared evidence, question 17 you		
21	enunciate Foothills overall hiring policy in these		
22	terms:		
23	"When the qualifications of a northerner and		
24	southerner are equal, preference will be given		
25	to the northerner."		
26	I take it you mean by that that when you have a northerner		
27	and a non-northerner both capable of doing the job, the		
28	northerner will be preferred?		
29	WITNESS BURRELL: That's the		



Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

with trade unions makes me ask you to note that there is a difference between what I said and simply comparing

My background in dealing

a northerner to a southerner to take the most capable of the two. Let me put it this way. If you compare both the northerner and the non-northerner to the job, that is one thing. If you compare the northerner to the nonnortherner and take the better, the more capable, that's

a different thing. Does that make any sense to you?

A What we're saying here in that, we have had some discussion with the unions and they appreciate the position that there is a need to give preferential hiring to northerners. What we're saying here is that it's important that jobs that are made available are filled by people that are qualified to do those jobs, and that in a given situation if there is a northerner and a southerner having the qualifications to do that particular skill or trade, then the northerner should get the preference.

THE COMMISSIONER: I think what Mr. Goudge is getting at is that both may have achieved a certain level that qualifies them for the position.

Is that sufficient to give preference to the northerner, or is it a case where both are qualified but the southerner's qualifications are greater than those of the northerner, will the northerner still get the position?

A Well --

Q Where both are qualified,

yet one has obviously better qualifications.



Burrell, Jensen, Ellwood MacLeod, Devell Cross-Exam by Goudge

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be over-qualified, is that what you're saving?

A -- in a sense one might

0 Yes, over-qualified, if

you want to put it that way.

Well, the point is if the individual has the qualifications to do the job and there's a southerner who has the qualifications and then some, as long as the northerner has those qualifications to do the -- to perform the duties, then he would get the preference.

THE COMMISSIONER: O.K., I

understand.

MR. GOUDGE: The corollary of that, Mr. Burrell, is that you require as part of your overall picture a detailed set of job descriptions and qualifications to go with them so that you can evaluate jobs and available northerners.

Yes, I think that's a case in any job whether you detail it on sheets of paper, you still have to look at what is required, what skills are required to do a certain job and evaluate the people that are available and assign the jobs accordingly.

Now, you say on the next page of your evidence that one of the things you're prepared to consider, looking at the bottom of the page, is an employment rotation system and as well a labor pool system for the construction phase. Dealing first with the employment rotation scheme, has your company



Burrell, Jensen, Ellwood MacLeod, Deyell

Cross-Exam by Goudge had a look at any cases where this sort of thing has been employed in the past with success? 



A I was just asking "r.

Deyell if Trunk Line had looked at that and he said
that they hadn t at this time. The point, I think the
point we're making here of course, is that there's a
considerable concern in the communities that the skilled
labour force will be drained off towards -- to work
on the pipeline and perhaps one way around it might
be the establishing of a pool system or a rotating
system which sould allow people to remain in the communities
and fulfill the functions that are required there and
still allow people to go on to the pipeline. Here again
it's a point we're saying that we're prepared to address
this and look into it if it's a requirement and that's
the point that we're making. We're being flexible in
this regard.

Q Yes. As to either a rotation syst m or a labour pool system though, are you aware of any rototypes that you've looked at or that we could look at to evaluate their work ability?

he believes t was tried on the Pointed Mountain job and -- but, we'r really not certain of the details on that.

Q Let me ask you one other aspect of a cotation system. Can you tell us how compatible a rtation system is with the efficiency you would require in your operation?

very well. There's going to be a number of jobs available and I thir the important thing is, is that the manpower



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is available to do the -- to perform the tasks that are required and as long as you have the people there that have the skills to do it, I'm certain if there was a rotation scheme desirable that as long as the manpower was made available to perform the task and I think it would work out fine.

Q That's the only criterion
I take it, provided there are people at work to do the
job, the length of time individual employees spend on
the job is of no consequence to you?

A Well, I think we have to be reasonable about the length of time they spent on a job. We wouldn't want people coming in for two days and leaving, but the point we're getting at here is to be as a possible means whereby the people would be available in the communities to perform those needed tasks that have to be done in the communities and still allow people to go out and work on a pipeline if they wish to do so. And as far as the length of time on the pipeline, it would have to be a reasonable length of time that this rotational scheme works.

Q Reasonable I take it because there is some cost in efficiency terms if it's less than reasonable?

A Yes, you have to move people in and out and that's a cost and there is disruption involved, but I think when you really get down to it, the important thing is to have the people there that are capable of doing the job, that's the



WITNESS DEYELL: Mr. Goudge,

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important thing really.

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efficiency.

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Q Well, can you give us any estimate of what is a reasonable length of time that people must stay on the job to avoid sacrificing efficiency?

could I add a little something here that may have some bearing on this? I believe that insofar as the rotation system is concerned, that it would work with the nonskilled labour but it would be very difficult to work it with the skilled labour. That as far as the skilled labour is concerned, once they're on a project, that the efficiency would suffer considerably if you tried to rotate them, but insofar as the non-skill labour, you can pick almost any time frame that you wish, that would fit in with the desires of the people that live in the community. That it should not really disrupt the

0 So, with the non-skill labour, you would be prepared to see a system that simply ensured people on the job regardless of minimum time?

> Α Yes, that's correct.

WITNESS BURRELL: When we made

this statement, we weren't dealing with the southern situation.

> 0 No. I understand that.

In line with what Mr. A

Deyell was saying, we were more concerned with the effect



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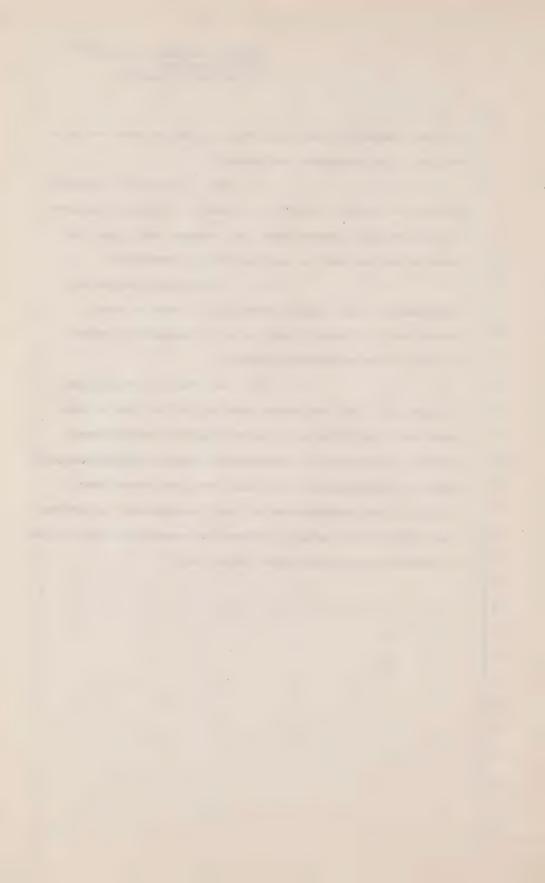
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on the community itself and this is why we were -- this was why this statement was made.

Q Now, I take it it would be part -- sorry I didn't -- I take it it would be part of any rotation system that the company would pay the transportation cost in and out of the community?

A I think that would be reasonable. Here again, providing it wasn't every second day. It would have to be a reasonable length of time as we were saying before.

Q Mr. Burrell, moving on
to page 6 of your evidence, you say at the top of that
page that Foothills will, by contractual obligations,
assure itself that its contractors and its subcontractors
operate in compliance with the necessary conditions.
I take it you contemplate by that, contractual relations
that provide for penalty clauses or termination provisions
if the requisite conditions are not met?



Burrell, Deyell, Ellwood
Jensen, MacLeod
Cross-Exam by Goudge

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A Yes and that if we were hiring sub-contractors from the south for instance that we would require that they arrange to get their people from the south -- the southern peoples through the hiring halls and so on rather than trying to hire people in the north or encouraging people to come north and hiring southerners in the north. They would want to have the hiring of southerners done through the south.

Q Now one of the matters that you will be policing in this way is the northern preference policy I take it?

A Yes.

Q Would you agree that one of the characteristics of a northern preference policy that is essential in order to police it is that there be some measurements standard that your company can use to determine whether northern preference is actually being observed by your contractors?

A Yes. I think that any program to determine the success has to have some measurement standard. Yes.

Q Let me ask you in that context whether you see any merit in quotas -- in a quota system --

A I personally --

O -- as a standard by

which you can enforce a northern preference hiring policy?

A Well, I think that a guota



## Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

system is a very easy way to do it. You can put numbers against the situation and say that the situation is being met. But I think in actuality, that the quota system is really not the way to go. It means that the company instead of perhaps doing its best effort is trying to meet numbers and are just hiring people and putting them into slots that otherwise they should not be in or are not qualified or whatever. I really think that the quota system would be the wrong measure.

Q No doubt though that the quota system is easy to police?

A It is very easy to police.

But I don't know whether that should be the criteria

for determining whether the program is successful or not.

Q Well let me ask you how without a quota system your company would be able to police the northern preference hiring policy you seek to have your contractors use?

A First of all, I think the importance to northern hiring policy be the procedure itself be understood and agreed to by all the parties concerned. Then it is a case of determining whether the policy itself or the procedure itself, the company is making the best effort. Now that is a very difficult thing in many cases to evaluate. But really, I think it's the intent of the program, it's the important thing, the effort that the company is making and not really how many people you are putting into the project which a quota system measures.

For instance, it may very well



Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

be that when the opportunities for jobs are made available that very few people will want to take the jobs. But those that do are given every opportunity. I think that is important. But if we had a guota system, and very few people were interested in taking jobs then the company would be in the very difficult position would have to go out and basically have people just -- just take people and put them where they could and hide them in corners so to speak in order to meet a quota system which I think is wrong.

O Yes, I understand your objections to the quota system from that point of view.

My concern is to get your thoughts on how you as a company or any regulatory agency can effectively police a northern hiring preference policy without some measurement standard like the quota system?

A Well, in our --

WITNESS FLLWOOD: I've given

this some thought Mr. Goudge and discussed it with various people in Manpower and training programs. It seems to me that the appropriate measure to use here is to relate the number of positions filled by northerners against the number of applicants from the north.

O Could you explain that?

Do you mean by that that if you have 100% of your northern applicants given positions, your contractor is doing perfectly?

A Yes. He can't do any better. That is fairly obvious. Well, that seems to me to be the appropriate measure. If we are successful



Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

with northern hire that you should gauge that success by looking at how many people that we are able to place in relation to how many applied. Not in relation to how many southerners we hire. That doesn't seem to me to be an appropriate measure.

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## Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

Q And have you given any thought to where the line should be drawn? That is what kind of requirement you would put on your contractors? Would they have to hire all those who applied, some or--

A We haven't given any thought to whether it ought to be 50% or 100% because we're of the opinion that all who apply will be able to get a job.

WITNESS BURRELL: I was going to say, too, if you look at our delivery system that we've set out that we suggest that there should be a detailed advance information system provided to make people aware of the opportunities that are available and then the northerner shows an interest as to whether he wants to take employment on the pipeline, and this is a point, I think, ties in with what Mr. Ellwood was just saying.

Q Coming back to Mr. Ellwood's scheme, Mr. Ellwood, would you envisage that the onus would be on the contractor to show why he was not able to hire a northern applicant? Is that a fair onus to put upon him?

WITNESS ELLWOOD: Yes. I was just thinking in relation of how we might police this as a company. That's the question we would put to him: "Why didn't you?" The onus would be on him to show us that in fact he could not or had some other reasoning for not hiring a northerner.

Q Mr. Burrell, the next question that you responded to in your evidence in chief



## <u>Burrell</u>, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

2	dealt with on page 6 dealt with the definition of a		
3	northerner.		
4	WITNESS BURRELL: Yes.		
5	Q The definition you give,		
6	I take it, is your best view as to the definition which		
7	minimizes social disruption. Is that correct?		
8	A It's the definition that		
9	we've used to define the northerner who would qualify,		
10	if you wish, for this northern preference hiring.		
11	Q And while I understand you		
12	to say that in that context the definition of "northerner		
13	would have to be generally agreed upon		
14	A No doubt about that.		
15	Q this is your view of		
16	what it should be in the best of all worlds.		
17	A We agree this is a reason-		
18	able definition, yes.		
19	Q You've really, as I under-		
20	stand the definition, created two sub-classes within your		
21	class of northerners natives, on the one hand, and		
22	the others who are resident on permit date.		
23	A Yes. We directed our		
24	program to northerner. We've been referring to it as		
25	'horthern preferential hire."		
26	Q In the context of a northern		
27	hiring preference policy, do you see any possible diffi-		
28	culty with the creation of these two sub-classes in this		
29	sense, that the sub-classes will effectively be competing		
30 1	with each other for the preferred jobs, for the jobs		



## Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

given through the preference system?

there will be enough jobs that anybody that is interested in the north in getting employment will have that opportunity and I think you have to look at more than just the pipeline; I think you have to look at the associated development of gas plant and exploration and development work, and you have to look at the integrated system together and on that basis we're confident that anyone in that north that applies for a job will be able to get a job in construction.

Q Well, let me put it to you if this way. Would you agree that/your class of northerners included only natives, that natives would stand a better chance of benefitting from your northern preference policy than with the definition you offer?

A No, I think under the definition that we have that natives would have an equal opportunity for employment as compared to just native in our definition.

Q One other problem that I'd like to put to you about this definition is whether because of its residence provision -- that is the provision which dates only from the permit date -- it would encourage speculators, if you will, to come north immediately prior to any apparent permit granting?

A I suppose that possibility

exists, yes.

Q And there's no doubt that if the resident date were put back before the permit date



Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Doudge

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in time, that possibility is reduced.

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It would make it more A

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restrictive, yes.

date, for example?

we're putting forward.

Do you see any difficulty 0

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with putting it back in time beyond the permit date?

7

Α Not really. I think it's

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a case of having a definition that each of the groups

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that are involved can agree to and understand so that

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we're all working on the same basis as to what a

11

northerner is for purposes of hiring policy.

12

Why did you choose the

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permit date as opposed to five years before the permit

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It seemed to us to be a Α

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reasonable time, and something that we could work to,

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and still meet the requirements of the policies that

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Burrell, Devell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

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that will have lived in the Territories three or four years prior to the permit being issued. That would restrict them from this preferential hiring. We thought that this particular date was reasonable to include those people too.

Q What is the Nortran

definition for "northerners"?

WITNESS DEYELL: I am sorry.

I don't know what it is at the present time. I know what it was when we first started but I don't think it is the same now. I believe when we first started the Nortran program that we had a three year limitation that you had to have lived in the north for a minimum of three years to be considered to be a northerner. But I don't know what it is now.

Q What was your thinking at that time Mr. Deyell about that date?

A Well, it was somewhat along the lines of just what you are talking about now that it would prevent those people who were taking advantage of something on the spur of the moment rather than somebody who had lived here and had the real interest of living in the north in the long term.

WITNESS BURRELL: I have the

definition here.

Q What does it say then

Mr. Burrell on the subject of residency?

A For the purpose of the

Mortram Program -- maybe this is the point that we are



## Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

Q Now Mr. Burrell, you say

1	trying to make that Nortran and the Federal Government
2	and the N.W.T. Government all use a different definition.
3	It's for this reason we feel it is extremely important
4	that each of the parties understand what a northerner
5	is and we are consistent.
6	But in the Nortran definition
7	a northerner is defined as anyone with four years
8	residency. North is defined as the 25th base line and
9	up.
10	Q Well they have basically
11	a four year residency requirement?
12	A For the purpose of the
13	Nortran Program, yes.
14	Q So I take it Mr. Deyell
15	it is fair to say that the residency requirement is
16	more stringent now than it was when the program began?
17	A Yes, it is.
L 8	Q Do you know why it was
L9	made more stringent?
20	WITNESS DEYELL: Well I think
21	they had the same thing in mind. Why they changed it
22	by one year, I really don't know and I don't really
23	think the one year is that significant. Why they
24	changed it, I really don't know.
25	Q Mr. Burrell, I take it
26	that you see no social disadvantage flowing from your
27	definition as opposed to the Nortran definition?
28	WITNESS BURRELL: I can't
29	think of any right now.



Burrell, Deyell, Ellwood Jensen, MacLeod Cross-E xam by Goudge

something about training programs later on in your evidence. Let me ask you whether you, in making those comments were envisaging any kind of institutional programs training as opposed to on-the-job training programs?

Has your company given any thought to institutional training programs as a way of raising skill levels in the north?

A Well I think that in our delivery system, we dealt with a number of possibilities where training could be provided. I think the secretarial work that we spoke of here would fit into the category that you are speaking of. People that were interested in pursuing perhaps trades other than on the pipeline or perhaps wanting to get into apprenticeship programs perhaps could go to NAIT or SAIT.

As far as the jobs that are on the pipeline spreads, we saw that as on-the-job training or perhaps as is done in Alaska where they would set up a special training school to provide the people with upgrading their skills. For instance, a cat operator or a grader operator on a road certainly is qualified to do that work but is not familiar with the pipeline work. Perhaps some specialized training at AVTC or some other similar arrangment could upgrade him to the point where he would be working and familiar with the procedures that occur on the pipeline.

 $\Omega$  Yes. In Alaska, there is institutional training or training schools that are run by government, run by trade unions, run by contractors.

A Yes.



Burrell, <u>Deyell</u>, Fllwood Jensen, <u>MacLeod</u> Cross-Exam by Goudge

if I could add to that, we make use of those kind of

WITNESS DFYELL: Mr. Goudge,

schools in Alberta to the extent they available. It would be the policy insofar as our company is concerned

that that would extend to the north as well.

O Do you have any views either of your gentlemen, as to the workability of training schools or institutional training when it is run by government as opposed to trade unions as opposed to contractors? Which of those works best?

A Well, I don't think it really matters as long as there is input from industry to ensure that the type of program is structured along the lines that are really necessary for the final occupation that this trainee is going to be involved in.

Q Now, in terms of input from your company into such training programs -- such institutional training programs -- I take it there would have to be a willingness to participate in terms of financing of such programs in terms of personnel to assist in the teaching in such programs, in terms of equipment to be used in such programs. Would you agree with those three things?



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of this in the past.

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A Yes I would. This has been done in Alberta in the past and I see know reason why it can't be done here as well. It is still done in Alberta when the need arises for it.

Q I take it, Mr. Deyell, that your company or Alberta Gas Trunk participates in these training programmes in Alberta in the ways I've outlined, through financing, through personnel and through equipment?

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A Yes. We had done some

Mr. MacLeod, let me come

to you if I can for a moment please, and with some trepidation let me ask you to turn beyong your prepared text to the tables at the back of your paper. I'd like to get from you very briefly, if I can, just for the purposes of my understanding just how you went about preparing your tables so that I can see the assumptions that you work from in creating your estimates of secondary employment and the degree to which that would be filled by northerners and outsiders. Could you turn please to table five?

WITNESS MacLEOD: Yes .

Q That table, I take it,

is one of your three sub-regional tables?

A That's right.

Q Dealing with the Mackenzie

region, and this one in particular is which one? It's the delta I take it.



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The delta, yes.

Now, let me just go 0

through it with you briefly if I can to see if I understand it. The first line on your table deals with total sub-regional labour availability and I take it those figures you get by simply taking the Hire North figures plus the Nortran figures and prorating those figures over the delta regions population and then escalating the resulting figure by your 4.5 percent growth figure?

Α

- Yes, that's right. Α
- 0 The next set of numbers
- in your table relate to the increases in employment produced by the hydrocarbon industry, is that correct?
  - A Yes.
- 0 And perhaps you could tell us where you get your figures for the four subcategories or the three sub-categories there, pipeline operation and maintenance, secondly, gas plants operation and thirdly, field development. Where do you get your numbers for each of those lines?
- Okay, the pipeline operation and maintenance figures come from the Foothills application, the gas plants 0 & M positions come from producers evidence presented in Inuvik last winter. The field development figures come from producers and discussions I've had with one of the producers in particular.
  - Which one?
  - Which one? Α



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29 30 1 development? 0 Yes.

Α Imperial Oil.

0 And you use those three sub-figures to get your total.

> A Yes.

Now, you then move on 0 to what I'm interested in and these are your secondary employment effects due to the incremental hydrocarbon

Yes.

Now, let's perhaps deal, 0

because I think you said it's easier, with government secondary employment before we deal with private secondary employment. So, would you move to the block of figures that's headed "Government Secondary Employment"?

To begin with, you have five numbers, 0.00, .25, .50, .75 and 1.00. Those, as I understand it from your evidence are your residency options as you've called it?

> A ... Yes.

And if I understand it correctly, the first number I read assumes that all of the non-resident new jobs, new job holders, will be commuters?

> Only in the field develop-A

ment sector.

employment, is that so?

All these five assumptions, these five residency assumptions apply only to field



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A That's correct. In other words, personnel originating from the outside to hold secondary employment and O & M positions would be expected to reside in the impact region.

Q Yes. Now, moving to the first number in your block of numbers, under 1977, the 0 residency option provides you with 43 government jobs.

A Yes.

Q Is that correct?

A Yes.

Q Now, could you explain

At one point in my

how you get that number, 43?

evidence I mentioned, I believe, that there were four co-efficients variables, four which I've used. I was interested in measuring the impact on employment in the local and public and private sectors of longstanding northern residents who where previously unemployed and which have received pipeline related employment. The second group of people would be the outsiders moving into the region for the first time and the third group would be the transient labour and the fourth variable related to the overall hydrocarbon activity going on in the delta.

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there.

Burrell, Jensen, Ellwood MacLeod, Deyell

Cross-Exam by Goudge To begin with, in deriving 1 43 2 you assume 405 new field development jobs. 3 Yes. 4 0 And you assume that of 5 those 405, a certain number will be filled by non-6 northerners. 7 Α That's right. 8 And all those will be 9 commuters, will not be northern residents. 10 No, that's not correct. 11 Q Well, will move into the 12 north. 13 What I'm saying there is A 14 that if you have 405 jobs, 257 local residents; however, 15 if you move onto the following page you find that only 16 114 of those local residents are in a position to accept 17 those 405 jobs. 18 I understand that. 19 So the shortfall has to Α 20 be made up by people originating from the outside. 21 Yes, and of that shortfall --0 22 That shortfall is 395. A 23 0 -- yes, none of those 24 people for the purposes of your No. 43, none of those 25 people will move into the north because it's a zero 26 residency option. 27 That conclusion is correct Α

but the reasoning -- there's a problem with the reasoning

working in the field development sector.

That residency option only applies to personnel



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Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

	Cross-Exam by Goudge
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2	. Q Right.
3	A Now your conclusion is
4	correct for 1977, because there are no operations and
5	maintenance positions.
6	Q Right.
7	A But you could not use the
8	same reasoning for later years when there are O. and M.
9	positions.
10	Q Yes. Sorry, now how
11	do you get from those set of assumptions to your propos
12	tion that 43 new government jobs will be created?
13	A In the appendix you have
14	a listing of my co-efficients. That should be at the e
15	of the tables.
16	Q Yes.
17	A So what I have done to
18	determine the secondary employment in the government
19	sector is to multiply those co-efficients applicable to
20	each group of people which would be receiving employmen
21	and summing the total. For example, I take the number o
22	northerners who can take positions in 1977. That number
23	was 114.
24	Q 114 is
25	A Under the lowest option.
26	Q 114 is the figure that
27	appears opposite the zero residency option on page 2 of
28	Table 5.

Right.

1977.

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Burrell, Jensen, Ellwood MacLeod, Devell Cross-Exam by Goudge

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So then I say that these 114 people are going to go out and spend their incomes locally; but there's a high leakage factor in the area. something in the order of 60%.

Q Stopping you there, that means that 60% of every dollar they spend is spend on an import to the north?

> Yes. Α

> Yes.

A There's 40% that stay in

the north, 40% of every dollar. That 40% has to be split between the public and private sectors. In the N.W.T., I'm assuming just the N.W.T., in the pipeline corridor this split between public and private employment is one-third private and two-thirds public. So I'm saying of that 40%, one-third of that is going to go into the public sector and two-thirds will go into the private sector. That's how I derived the co-efficients, C-1, C-2, D-1 and D-2, which appear in the appendix.

Getting back to my equation, I take those 114 people and I multiply times the relevant co-efficients which are C-1 and C-2, and the sum of those co-efficients which according to my table 8 are .101 and .018, and that gives me the effect of the employment of previously unemployed northerners on the demand for goods and services in public and private sectors in the north.

O And out of that you break

the demand for public sector product and get your 43



## Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

Yes. I'm going through

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additional government jobs required.

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Now --

A So you have one equation to determine the total secondary employment and we have

just gone through an equation to determine the government secondary employment, the difference between the

this procedure not only for the previously unemployed

for transients, and have an add-on factor which takes

0

northerners but also for new arrivals into the area and

into consideration other expenditures of the hydrocarbon

two gives you the private secondary employment.

Q I see; and then you

simply add the total secondary employment figure to your hydrocarbon increased employment to get the total -- what

you call a total incremental employment.

A Yes.

Q Your table then goes on,

as I understand it, to take those total added jobs for the region and assign them to northerners and outsiders.

A Yes.

Q And perhaps you could

describe how you do that.

A This assignment is based

upon two criteria. First is the relative availability of employment in field development and the secondary

sectors, and it's also a function of skill levels, and

you'll also notice in my final page in the appendix there



Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

that I give these skill levels for the four categories of employment. So I started off by assigning pipeline employment with operations and gas plant operations employment based on the skill levels of the people, and these skill levels were based on Nortran enrollments and projected enrollments.



## Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Goudge

That was also a function

1 Yes. Perhaps we could 2 just go to your Appendix which you have titled "Table 13". 3 Your first line is headed "Pipeline Operations and 4 Maintenance". The first figure is ".21" under "1975". 5 Α Yes --6 0 First of all, you get that 7 figure from Nortran? 8 A Yes. 9 0 What does that figure mean? 10 A That indicates that 21% 11 of the peak level pipeline O & M positions could be 12 held by Nortran trainees -- by northerners. 13 0 If you take the last 14 figure in that line "1985", Nortran says that by that 15 date. 70% of the O & M jobs will be fillable by Nortran 16 people. 17 A Nortran is not saying that. 18 is what I am saying. I am saying I've got 19 Nortran trainees plus company trainees that might be 20 hired on the spot. Together they could take up 70% of 21 the positions. 22 0 Similarly, your figures 23 for gas plant operation and maintenance, where do they 24 come from in Table 13? 25 They were derived in the A 26 same way. 27 From Nortran? 0 28 Based on Nortran, yes. A 29 Yes. Field development? 30

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Burrell, Jensen, Ellwood Deyell, MacLeod Cross-Exam by Goudge

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of Nortran data.

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0 Secondary employment?

A Secondary employment --

that was based upon personal observation; primarily surveys I have conducted with employers in the pipeline corridor.

So to take secondary employment in 1985, your personal observations lead you to the conclusion that by that date, 50% of the new secondary employment jobs can be filled by northerners

Yes.

Based on --

MR. HOLLINGWORTH: He said it's

more than personal observation. He also said he had made studies.

MR. GOUDGE: What studies

are you referring to?

A Well, I worked on a study for the Chamber of Commerce last year which was an assessment of local busin &s capabilities and we had many questions dealing with the manpower area -- the origin of employees and so on.

And you took from that 0 certain conclusions about the training capability in northern business?

Well, that 20% I started A off with is not really based on the training capability. It was more on the actual use. It appeared at 20% of the existing personnel at the time.

Yes. That is your 1975



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## Bur rell, Jensen, Ellwood Deyell, <u>MacLeo</u>d Cross-Exam by Goudge

1	figure?
2	. A Yes.
3	Q Over the following ten
4	years, I take it you must build in your own views about
5	the training capability of northern business?
6	A Not only of northern
7	business but of the AVTC and of the school system in
8	general.
9	Q Right. Right and it is
10	with those assumptions that you realize your .50 figure
11	for secondary employment in 1985?
12	A That's correct.
13	Q So you take those skill
14	coefficients if I may call them that and could you
15	perhaps go back to Table 5 and indicate how you used thos
16	to determine the number of total incremental employment
17	positions to be filled by local residents and the number
18	to be filled by outsiders?
19	A O.K. In 1978, we have the
20	first O & M positions open. There are seven. For 1978,
21	the skill coefficient is .3. So .3 of 7 gives you
22	roughly two positions which could be held by local
23	residents.
24	Q You go through a similar
25	calculation for gas plant operations, field development
26	using your five residency options and secondary employmen
27	using your five residency options?
28	A Subject to qualification.

When I get into field development and secondary employment,

I take into consideration not only skill levels but the



Burrell, Jensen, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Goudge

Cross-Exam by Goudge 1 relative availability of employment in those two 2 categories of employment. 3 0 Field development and 4 secondary employment? 5 Yes. A 6 0 Yes. 7 Because if it were just Α 8 based on skill, we would have an excessive number of 9 people involved in secondary employment. 10 You have to split those 0 11 people between the two categories? 12 Α Yes. 13 0 Now, you go through 14 calculations on the next page of your table relating 15 to the filling of these jobs by non-northerners and 16 the manpower shortage -- well, the manpower shortage 17 created and the filling of these jobs therefore by 18 non-northerners and transients. Is that correct? 19 Α Yes. 20 That is simply a matter 21 of adding and subtracting basically? 22 Yes, it is. A 23 From that, you derive your 0 24 in-migrant figures if I can call them that -- your 25 resulting population increase? 26 Yes. 27 Having got the number of 28

jobs that you say in each category will be filled by non-northerners on your various assumptions, you multiplied by 2.5 to get the resulting population increase?



1	Burrell, Jensen, Ellwood Deyell, <u>MacLeod</u> Cross-Exam by Goudge
2	A Yes.
3	Q 2.5 is the multiplier you
	simply take from Gemini North?
4	A Yes.
5	Q Where did they get it?
6	Do you know?
7	A I think it was based on
8	field work that they had done.
9	Q Field work designed to
10	reveal the number of people that actually come with an
11	in-migrant in practise?
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prehensible form.

A Prior to the 1971 census they tried to put together population estimates for the Mackenzie district and they did this by means of a door to door survey. I think this was the basis for this estimate.

Mr. Trusty, in giving 0 evidence here used a multiplier, if I can call it that, for population increase of 3.5 rather than 2.5, based. as I understood him, on the theory that when a job holder comes north, he brings with him a wife and one and a half children.

What I'm saying is that Α they bring a wife and half child, -- one half child.

Our study was done just for the city of Yellowknife and I think their figure was 2.7 as opposed to my 2.5, but that 2.7 applies to the existing population in addition to the recent arrivals. My 2.5 applies only to newcomers. So if you're considering your original base, you're also including long-term residents who can be expected to have larger families than people who just arrived.

Yes. Now, Mr. MacLeod, having gone through that with you, and having got some of your assumptions clear, I wonder if I could ask you if you would be good enough, through Mr. Hollingworth, to at least let us have access to your computer book there should we require it? Would that be a problem?

Well, it's in an incom-A



Burrell, Jensen, Ellwood, Deyell, <u>MacLeod</u> Cross-Exam by Goudge

	Cross-Exam by Goudge			
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2	Q I'm only too well aware			
3	of that.			
4	A Well, it's written in			
5	FORTRAN with a few comment cards in French.			
6 "	Q Was that on purpose?			
7	A There are 250 variables			
3	which are not listed anywhere.			
9	Q Well, if you would be			
10	good enough to let us have access.			
11	THE COMMISSIONER: I think			
12	Mr. Goudge will have no difficulty with it.			
13				
14				
15	MR. HOLLINGWORTH: Could I			
16	have a moment please?			
17	Mr. MacLeod tells me we can			
18	certainly produce the book but it's worthless in its			
19	present form. The variables aren't listed there. He'd			
20	have to scrounge around for a long time, probably upward			
21	of a month to get back with a list of all those variable			
22	and even then it's questionable what use it's going to			
: : !	be to Mr. Goudge.			
24 4	MR. GOUDGE: Well, possibly			
2.5 :	but that's why Mr. Commissioner, if we have any question			
26	that want further elaboration of the variables that			
27	Mr. MacLeod used, and I'm sure my friend will co-operate			
28	with us in responding to requests.			
29	MR. HOLLINGWORTH: Well, that			

makes more sense.



Burrell, Jeusen, Fliwood, Deyell, Macheod Cross-Exam by Goudge

THE COMMISSIONER: All right.

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Well, let's leave it at that and you might speak to Mr. MacLeod at the coffee break, which we'll reach as soon as you've completed your cross-examination.

MR. GOUDGE: This is the

carrot stick approach.

THE COMMISSIONER: So, there's no direction that anything be produced and we'll just leave it at that.

MR. GOUDGE: No, I'm content with that. Mr. MacLeod, one last question of you, you say on page 22 of your evidence in chief, turning back to that, question 35, that you had two reasons for not making any secondary employment estimates for the construction phase, the first was that that phase is, in your view, likely to be relatively short.

A Yes.

Q Were looping a likelihood,
I take it you might well think it worthwhile to make
secondary employment estimates for construction of
pipelines.

A But no looping is anticipated.

Q Well, I understand you're

view on that. The second reason you give, is, as you put it, the capacity of northern work force and business community to benefit from induced economic effects may not differ substantially from one phase to the other.

Do you mean by that that it's your best estimate that the secondary employment produced in the construction phase will be roughly the



same as what you've documented for the operations phase?

A No, not at all. Secondary opportunities will be much greater in the construction phase, but the capacity of the local economy to take advantage of these much more numerous opportunities will not be much greater in the construction phase than in the operations phase.

Q I take it the conclusion from that is that the in-migration in the construction phase is likely to be much greater?

that conclusion. We talk about-- various people have spoken about a multiplier something in the area of 1.5 in the Territories. What I would say is that -- I'd say the overall multiplier effects of the entire project throughout the world might be somewhere between 7 and 10 and how much of that secondary spin-off do you want to keep in the Territories? It could be greatly expanded if you decide to put a pipe manufacturing facility in Hay River but we're not going to do that. I don't think there's any attention being given to that.

So, by excluding that possibility, you're directing some of these spin-off effects to other parts of the world, outside of the corridor.

Q So, I take it your second reason comes down to this, that the northern

economy and the northern work force have a relatively constant capability to benefit from secondary employment?

A Yes.

O And it will be much the



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same in the construction phase as you estimate it to be in the operations phase?

That's right. There's A very little local manufacture, so most of the local content in Territorial production, say gross Territorial product, comes in the form of labour, whether it be management or any other kind of labour.

Yes. You would agree though, that if there is going to be much greater secondary employment generated in the construction phase than in the operations phase?

> Α Yes.

The shortfall between Q the demand required, the number of jobs that need to be filled and the capacity to fill them in the north, will be greater in the construction phase than in the operations phase?

> Yes. A

And doesn't that lead 0 inevitably to the greater in-migration conclusion I recited?

But that shortfall does Α not have to be met in the Territories. It can be met somewhere else. You leave your pipeline -- you leave your pipe manufacturing facilities in the south and that s part of this desparity that will be met in the south, not in the north.

Now, some of this shortfall can be handled in the south, it doesn't have to be done



in the north.

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MR. HOLLINGWORTH: Maybe you could help

me out here, Mr. Goudge, I always assumed in-migration to mean someone coming in to stay rather than someone coming in to work for a while and then go out. Perhaps you could let us know what your definition is so that --MR. GOUDGE: Well, I was using

in-migration -- I was assuming an in-migrant, for your assistance, Mr. MacLeod, to be a person who came in to fill a secondary job created by the construction phase.

Yes, I would go along with that. That a person who comes in from outside to work in a camp for three weeks then go back out, he would not be an in-migrant.

No. I understand.

Finally Mr. Burrell, a couple

of questions for you again. You speak at some length, beginning I think at page 49 of your evidence; about delivery systems.



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Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

WITNESS BURRELL: Yes.

Q And you say at the bottom of page 49 that it's your opinion that a single group should take the responsibility for the overall operation.

A Yes.

Q I take it that group would either be your company or the government, or a native organization, or a third party contractor.

a two-tier delivery system in a sense. If you perhaps turn to the framework that's shown on page 85, we think there is advantages in having a delivery system that's available to do more than just provide manpower for the pipeline-associated developments, something that would be useful on an ongoing basis. It seems to us that the advance information in the initial scheme and the northern interest section of it could very well be handled by the government departments that are presently set up to provide such a function, and that would ensure an ongoing process which we believe, as I said before, is important.

But then as you get into the

-- below the initial screening as we show on our

framework here, we get into basically what is a projectoriented delivery portion of that delivery system, and
we think that perhaps from there down could be handled
on a project basis. It seems to us that as an example
for the pipeline side of it that the joint Canadian
Pipeline Advisory Committee might be a suitable group
to head up that portion of it.



## Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

Cross-Exam by Goudge
Q . Rather than you or the
general contractor constructing a specific segment of
the line?
A At this point in time that
split that I'm talking about seems reasonable. Now
Q Why do you say that?
A Why does it
Q Why would you choose the
Pipeline Advisory Council rather than your organization?
A Oh, I think in Mr. Kosten's
evidence he refers to the need to have the Pipeline
Advisory Committee working on behalf of Foothills to
develop the project agreement, and it seems to me that
this would be a very appropriate arrangement to
appropriate item to include in that arrangement.
Q Because that committe will
have to build in this delivery system to their
collective agreement. Is that really what you're saying?
A In my opinion the manpower
delivery system, the framework, how it's going to work
and so on would be an important ingredient in the project
agreement. Now we talk about the pipeline side of it.
As you get into the building trades, some similar arrange
ment could be worked on that side too.
Q Where?
A Where it involves people

being assigned to work in the building trades.

Q Now, going back a step,

30 I take it it's your view that this system operated by

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#### Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

1 whomever, ought to work for all development projects 2 taking place in the north, not simply for the pipeline. 3 A Certainly until the delivery 4 of people, the system gets established; but as I was 5 saying before, the first three steps that we have out-6 lined in this framework could very nicely be handled 7 by the government departments that are set up to do that and that the first three steps are something that 9 would have to be done regardless of what the development 10 project is. Once you get below that, when people are 11 assigned to, say, various phases of a project, then that 12 portion of it should, in my opinion, be set up specifi-13 cally for the project itself. But it would be unfortunate 14 I think, to have set up a program on a one-shot deal, 15 so to speak, and not take advantages of it on an ongoing 16 17 basis. One of the difficulties 18 with that surely is that other projects not served by 19 such a delivery system will soon find themselves lacking 20 in employees. 21 Are you talking about a Α 22 development that is taking place at the same time as the 23 pipeline? 24 25

Yes. 0

Well, then I was thinking Α more of development that took place following the pipeline; but certainly if there was a development taking place at the same time as the pipeline, there should be a consideration in this delivery system because



#### Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

really the point is to provide employment opportunities for northern people, and whether it's on a pipeline or in a gas plant or other development, may not be that important so long as the opportunities are provided for gainful employment.

Q Yes, and at least that's the higher levels of your process, the first three steps thatyou referred to --

A Yes.

Q -- you'd have to encompass all development going on at any one time to avoid simply providing employees to the one project.

A Exactly, and that is how this was structured. As you can see from the initial screenings, if you look at 85, page 85 you see that from initial screening that people are assigned to various work areas and if there are other developments going on at that time, there would be -- I would think it would be very easy to add additional blocks, certainly.

Q Now, in your view who is responsible for financing this scheme?

A Oh, I think we'd have to 
-- that would be a matter, of course, for negotiation.

Certainly the applicant would have involvement in this.

Of course, you realize that Canada Manpower currently 
puts funds forward for the training of northern people, 
and there would have to be some agreement reached there.

Q Yes, basically between

the applicant and government?



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Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

A That seems reasonable, yes. Q Now finally, Mr. Burrell, you talk about northern business and the opportunities your project will be designed to provide. Yes. On page 73 you say that Q in order to carry out your policy you'll purchase goods and services from resident northern companies whenever

it's practical to do so. I take it that's your basic

corporate view on this subject.



Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

A Yes.

Q I take it as well that you would acknowledge that there is certain local inflationary risk built into that policy?

A I suppose there is, yes.

Q Well, it's true, is it

not --

A Yes.

Q -- that the fact that you would anticipate purchasing goods and services from resident northern companies wherever practical is potentially an inflationary risk?

A Yes. I was going to use the word "potential". Yes.

Q I wonder whether you've given any thought to ways in which the inflationary impact of this company policy can be monitored by your company or by an outsider?

A Well I think one thing and this really addressing the question that you had -- but one thing I think that if you provide a larger flow of goods and generally speaking the unit cost of movement is lower. So in a sense I would think that the pipeline could, to some degree, reduce the transportation costs or in addition to that to provide greater access.

Now, as far as the inflationary trends are concerned, we would as a matter of policy tend to work with the communities as I was saying yesterday to be assured that the goods and services that are



### Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

required in the community are available to the community on a first call basis and that any services or supplies that are available above that, that is what we would be looking at.

Q That avoids shortages for the community. I take it that would be the aim of that particular policy?

A Yes.

Q It may no avoid inflationary pressures resulting from your purchasing from local suppliers?

A Inflationary in the sense are you saying that there is a greater demand for the product and therefore the cost goes up?

I would think that if we could

-- and we will work toward this end -- be assured that

the goods and services are available for the community

on a first call basis, then it really takes away that

excess demand on those particular products. I think that's

an important way to go about it.

O Mr. MacLeod, have you given any thought to the problem of local inflation generated by this kind of corporate policy?

 $\label{eq:witness} \mbox{MacLEOD:} \quad \mbox{I have looked}$  at the inflation question mainly from the point of view of manpower.

Q Inflating wage rates?

A Yes. I also feel that

the increase in wage rates, that is purchasing power for the local population would be greater than the rate of



# Burrell, Deyell, Ellwood Jensen, <u>MacLeod</u> Cross-Exam by Goudge

- 1		CIOS	s-mxam by Goudge
1	increase in prices at th	e ret	ail level so that
2		Q	So all those on increasing
3	wage rates would not be	hurt :	by increasing price levels?
1		A	It's on the contrary.
5	They would be much bette	r off	that at present.
6		Q	Yes. What about those
7	who live in the Territor	y who	are not on increasing wage
8	rates, who are on fixed	incom	es or fixed transfer payments
9		A	They would be disadvantaged.
		Ω	Have you given any thought
1	to possible solutions to	that	problem?
2		A	No I haven't. But I don't
3	think that the rate of p	rice	increase would be that
4	great.		
5		Q	But your reaction
6		A	Because the demand exerted
7	by the local northern ec	onomy	is minimal considered to
8	the manufacturing facili	ties	of the supply points in the
9	south.		
0		Q	What is your reaction to
2	indexing all fixed incom	e pay	ments in the north to deal
3	with local inflation?		
4		A	I think I would go along
5	with that.		
6		Q	You have no difficulty with
7	that?		
8		A	No, I don't.
9		Q	Now, Mr. Burrell, finally
	you say that in conjucti	on wi	th this corporate policy

caution need be exercised to avoid overextension of local



Burrell, Deyell , Ellwood Jensen, MacLeod Cross-Exam by Goudge

	Cross-Exam by Goudge				
1	business.				
2	WITNESS BURRELL: Yes.				
3	Q How do you propose that that				
4	be achieved?				
5	A I think quite reasonably				
6	I think it would be taking care of much in the sense of				
7	financing any undertaking that a contractor might have as				
8	an example because certainly when firms go to the bank				
9	or in lending agencies to acquire the capital to invest				
10	in equipment necessary to perform functions, one of the				
11	important things are that the firm be able to make those				
12	payments. That I would think would be a very good measure				
13	of resolving the problem that you are talking about.				
14	Q Well, do you simply rely				
15	on lending institutions to ensure that				
16	A No. That's one form				
17	one form I am saying. I get back to what we were saying				
18	yesterday that one of the reasons we have established the				
19	Business Opportunity Board of course is to give us advice				
20	on that matter as to how it we could best satisfy this				
21	concern.				
22	Q Have they given you any				
23	advice on that subject so far?				
24	A They have a number of programs				
25	underway and we haven't gotten from them anything definite				
26	yet. But certainly those are a number of the it's				
27	included in the number of the items which they should				
28	have under study for us right now.				

30 a scheme that regulates local business expansion and

Q What is your reaction to



Fred Dr. Bada Co.

Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Goudge

perhaps puts ceilings on the rate of local business expansion?

- A You mean all encompassing?
- Q Well, sector by sector.
- A It could get quite -- I

think -- quite restrictive. One might have to look at more than a finer breakdown than sector by sector. I think that that could work but it might very very restricted. Perhaps Mr. MacLeod might have some thoughts on that.

Q Do you have any views on

that Mr. MacLeod?

WITNESS MacLEOD: Well, I don't think that the applicant should adopt any paternalistic role. One of the qualities of the good businessman is to adapt to changing conditions. He is supposed to be able to foresee his markets.

Q And if he gets overextended, that's his problem?

A Right.

Q So I take it it would be

your view that there is no need to protect the local businessman against the danger of overextension?

A No, I don't think there is any need but I don't think he should be lured or given -- I don't think that prospects should be misrepresented as to encourage him to overextend himself.



#### Burrell, Jensen, Ellwood MacLeod, Devell Cross-Exam by Goudge

If you do that how do you

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Well. if the construction Α period is going to last three years, let's say from start to finish, I think that should be clearly spelled out, and that the applicant not imply that it might go on for six, seven, or eight years. Something along those lines to make sure that the prospects are not

0

avoid that kind of misrepresentation?

And in the face of full 0 information, if local businessmen choose to over-extend,

> Right. A

Let me ask you this, Mr.

It's your view, as I understand it, that businessmen need no protection against that kind of thing. It may be, would you agree, that their present customers need some kind of quarantee against having him devote all his energies to pipeline-related business? WITNESS MACLEOD:
A Yes, I would agree with

that.

How do you build in that

kind of protection?

I would think that Α possibly an organization like the Chamber of Commerce could assume some kind of role, as I have attended the occasional monthly meeting and usually if a regular supplier to other businesses in the community does not behave according to the wishes of his other regular



place.

#### Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

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meetings.  $\mbox{Q} \qquad \mbox{So some kind of at least}$  advisory body to deal with that issue needs to be in

clients, these issues are raised at Chamber of Commerce

A Yes. I don't think you can regulate it; but if I am a member of the Chamber of Commerce and I have a business which required batteries, and I have one regular supplier in town that supplies batteries and all of a sudden he decides to sell it all to a pipeline company, at the next Chamber of Commerce meeting I'm going to complain about the way he's treating his long-standing clientele. This does in fact take place at Chamber of Commerce meetings from time to time.

Q Do you think that would work in the pipeline context? The moral suasion --

Q Counter-balancing the

profit motive?

A Well, it's pragmatic.

Q It works now?

A It works now. I don't

think it would solve all problems.

MR. GOUDGE: Thank you very

much. Those are all the questions I have of this panel.

WITNESS BURRELL: Can I add one

thing to that?



Burrell, Jensen, Ellwood MacLeod, Deyell Cross-Exam by Goudge

A I guess we haven't brought it out, it is in the evidence but certainly we'll be Preparing a bidders' list and the bidders' list will take into consideration the capability of these various contractors to do the work. It's no different than is done in the south. So I think that in a way will overcome the difficulty, to some degree, the difficulties that you're talking about.

MR. GOUDGE: Thank you. Those are all the questions I have.

THE COMMISSIONER: O.K., we'll take a break for coffee then.

(PROCEEDINGS ADJOURNED FOR A FEW MINUTES)



Burrell, Jensen, Ellwood, Devell, MacLeod Cross-Exam by Bayly

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## (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT)

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ladies and gentlemen, let's return to our seats. MR. HOLLINGWORTH: Mr. Commissioner

THE COMMISSIONER: All right,

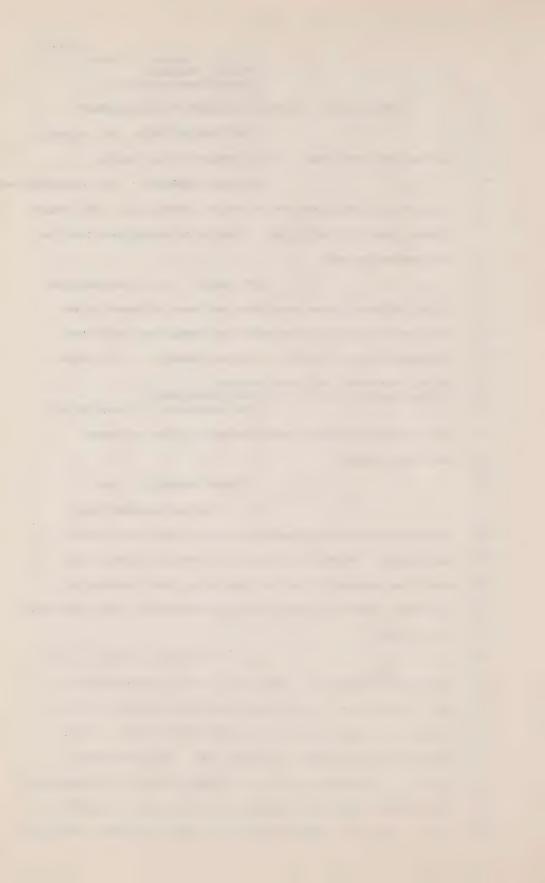
I think in his eagerness to start questioning, Mr. Goudge forgot that Mr. Bayly had a couple of questions that he had wanted to ask.

MR. BAYLY: Mr. Commissioner. I had deferred some questions and was informed by Mr. Hollingworth that there might be some, that could be answered by Mr. Burrell or other members of the panel on the manpower delivery system. CROSS-EXAMINATION BY MR. BAYLY (CONTINUED) I'm referring to page 50 of your direct evidence, with regard to the manpower delivery system.

WITNESS BURRELL: Yes.

0 You recommended that the delivery system operate quickly after the permit was issued. Have you thought of how much lead time would be necessary for the upgrading and training of northern people so they could participate in the construction work?

You have to look at the various occupations. Certainly if the northerner was not a welder or a sideboom operation, special skills, I don't -- there wouldn't be sufficient time to train people in that area, but there are, for instance, operators or so -- if they've had the experience dozer they would only take, perhaps a short time to upgrade them. There are other skills -- there are other positions



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which would require little or any upgrading so it would be a sliding situation depending upon the skill level that the northerner had and the type of work that he was going to go into. All right. The delivery

system itself is to carry out the function of bringing the needed workers to the job site and you have stated at page 50 that it would carry out the functions -- it's functions in the communities as much as possible. you tell me whether this would involve hiring halls in the communities?

> Α No.

0 Would the people be dispatched directly from their home communities to job locations?

Α That would be the intent. As we said in our evidence, we envision the hiring halls to be in Vancouver or Edmonton and that the connection with those hiring halls would be by telex to the communities and they would be dispatched from the communities through this telex system as we envision it.

Now, you wouldn't envisage then, people from Paulatuk or Holman or Sachs Harbour having to spend time in Inuvik, between the time that they were called up from the job and the time that they were sent out on it, if I can use that as an example?

No. the intent, as A we set up this proposed framework, the intent was to develop a system which would enable the northerners to remain in their community as long as it was possible to



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do so and we see that as being up to the time at which they are dispatched to the job.

All right, but with 0 regard to my actual question, will you be running this system in such a way that they won't be spending a day or two in the larger communities before being sent on to the job sites or to the construction camps?

The intent is that --A as envisaged, the intent is that they would go from their home communities to the job site.

By direct flight then?

An arrangement that's A

quite similar to that, yes, yes.

Well, when you say 0

Now, you're talking

Yes, okay. A

about having telexs from the communities to the hiring halls so that both can keep in touch with the needs and the availability of people to fill the jobs.

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Yes. A

Do you envisage telex

centers or in centers as facilities in only the main small as Holman, Paulatuk, North Star Harbour, to name three in the region?

We've looked upon this as providing telex facilities in the communities in the impact area and then outside the impact area, the need for a connection would be dictated by the interest



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O And with regard to a 48 hour dispatch system, which I understand is fairly standard in these kinds of operations, how is that going to work in the smaller communities, where you don't have regular flights and where in some communities you don't

shown outside the impact area.

even have scheduled flights?

I would think that under Ά certain circumstances there would be charter arrangements made. Certainly you wouldn't be bringing one or two people out at a time, but certainly there would be an arrangement set up whereby a number of people could be brought out at one particular time.

O Would you then be in a position of not going into a community to get people to do the work unless there were sufficient number; to justify it? If there were only two people who wanted to do the work in Paulatuk, for example, would you consider not going in there especially for them?

We would make them aware, the intent certainly, would be to make them aware of the job opportunities that were available and the number of say, two, in the number of people that are being required on this construction programme, I see no difficulty in bringing them out almost at any time and fitting them into the construction programme.

All right, but you see the problem, if somebody wants to work and you'd like to take them to the job site, but you may make the



decision that it isn't worth going in there just for him, you would want a package, you would want a Gulf Coppermine situation where you could go in and take out a planeload of people. It would make sense from an economic point of view.

A Mm-hm.

Q How far are you prepared to go to accommodate yourself to those individuals who want to do the work but who are in communities where not a very large number of people want to do the work?

A Well, I think we'd have to look at what was a reasonable expenditure to bring people out and at this point in time, it seems that if the cost of bringing people to the job site was tied to perhaps the cost of transporting workers to Edmonton, that seems to be -- at this point in time, would seem to be a reasonable measure of how far we would go for northerners outside the impact area.



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Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Bayly

1	Q That's how you would equate it then,
2	if it costs less than it costs to fly a worker in and
3	out from Edmonton, then they wouldn't be any problem.
4	If it costs more, then you would have to look to the
5	only possibility of going in if there were sufficient workers
6	to justify it and bring the costs down to that level per
7	worker ?
8	A I think it would be a good
9	measure. Perhaps the government may elect to subsidize
10	the difference. I don't know. But I think the measure
11	that we have put forward here seems reasonable.
12	Q All right and has the
13	government approached you or have you approached the
14	government with regard to employment for specific
15	communities in which the government may want to encourage
16	employment?
17	A We haven't spoken in that
18	detail to the government representatives. But we
19	have certainly talked to them with regard to our manpower
20	delivery system and the structure that we've proposed.
21	The people that we've discussed it with are representatives
22	of both Manpower and DIAND and the N.W.T. Government
23	respresentatives too. They thought that the approach that
24	we were using was quite reasonable.
25	Q Now, you've stated on page
26	50 again that you would try to utilize the services
27	available from existing sources as much as possible.
28	A Yes.

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Manpower, Social Development and the agencies you've just

I assume that involves



Burrel1, Deyell, Ellwood
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Cross-Exam by Bayly

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referred to in the answer to the last question.

A Yes. It doesn't seem

practical to duplicate services that already exist.

Q With regard to the utilization of these services, have you discussed whether you will be sharing the cost of expansion necessary to utilize the services or would you see that as a government responsibility?

A In discussing this with the representatives of the government, we've dealt on who would have responsibility for doing certain phases and so on. There was not commitment on their part at this point in time.

Q Now, in order for the system to work that joins the smaller communities to the hiring halls by telex, it might involve putting in telex into smaller communities where it doesn't now exist.

A o Yes, that's a possibility.

Well I believe the structure

O Would that be a company

telex? Would you be putting it in yourselves or would you see that as a function for government or somebody else?

A

this manpower delivery framework -- that aspect of it as we see it would be more or less come under the -- I guess the jurisdiction or the involvement of the government Manpower group. So the arrangements for putting the telex in I would think would be their responsibility.

Q Have you discussed that with



Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Bayly

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29 30 them as something --

A No, we have not. As I say, we did discuss with them the overall structure of this program but there was no decision made as to who would take responsibility of both for renting the program or financially.

Q All right.

MR. HOLLINGWORTH: Excuse me

Mr. Bayly, are you talking about the cost that CN charges for hooking up the telex system to existing phone wires?

MR. BAYLY: I am talking --

MR. HOLLINGWORTH: Is that what

you are concerned about -- the 20 or \$25 charge? Whatever it is?

MR. BAYLY: Well Mr. Commissionet,

I am concerned with who pays for installation in a system where there is perhaps not even an outside telephone. There are such places. You have been into them yourself sir in the community hearings. This involves more than just hooking it up to a phone system if you don't have the phone system.

THE COMMISSIONER: Mr. Burrell,

did you want to say something about that?

A We were talking about the telex and certainly if the load was fairly light, there would be no need for a telex. You could use the existing telephone system that exists. So the communications would be there. It's a case of determining whether a telex was required because of the load or whether a telephone system would be -- the existing telephone systems would be



Burrell, Deyell, Ellwood
Jensen, MacLeod
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1 adequate.

MR. BAYLY: My concern Mr.

Commissioner is whether the communities can expect upgrade in communications between themselves and the outside.

I am also concerned with who is going to foot the bill for that.

THE COMMISSIONER: Well I don't think Foothills has considered the matter in that detail.

MR. BAYLY: So with regard to the delivery system in general, it involves as I understand it, the cooperation of various levels of government for the plan that you have proposed to work.

A Yes, government -- all
the parties that are involved: the unions, the contractors
and so on. In our direct we said that it was important
that all parties involved understand and agree to
the system and assume their responsibility to make
it function properly.

Q Without trying to detract from your evidence, what you have done in this portion of it is to make a proposal of what Foothills would like to see done without having guarantee from any of the other parties involved if they are willing to participate in the carrying of it out.

A Well they say this is put forward as our view as to how this system -- a possible way in which this system can work. Now you have to appreciate that as time goes by and the permits are issued and there is restrictions put into it, there may be a need to modify this. But certainly we've had

Burrell, Deyell, Ellwood Jensen, MacLeod Cross-Exam by Bayly

discussions with government people and with union people and generally, they see this as a workable arrangement -- the overall framework as a workable arrangement.

MR. BAYLY: All right. Those are all the questions I have. Thank you very much.

MR. HOLLINGWORTH: No re-

examination sir.

THE COMMISSIONER: Well thank you very much members of the panel for your evidence and for cooperating with the counsel who asked questions of you. We certainly learned a good deal from you.

So, thank you again. It's nice to see you Mr. Deyell. I don't know how many of you we will be seeing again, but if not, thank you for all the cooperation you've provided to the Inquiry.

(WITNESSES ASIDE)



1	MR. GOUDGE: Sir, we propose
2	to proceed now by calling Dr. Mim Dixon as our witness,
3	and perhaps we could have her read her evidence in chief
4	before lunch.
5	THE COMMISSIONER: Yes.
6	
7	DR. MIM DIXON, sworn:
8	DIRECT EXAMINATION BY MR. ROLAND:
9	Q Dr. Dixon, to quickly run
10	through your qualifications, I understand you have a
11	B.A. in Economics from Washington University.
12	A Yes.
13	Q And an M.A. and a Ph.D. in
14	Anthropology from Northwestern University.
15	A That's right.
16	Q And that you are presently
17	a resident of Fairbanks, Alaska, and have been so since
18	1970.
19	A That's correct.
20	a Q That you are self-employed
21	consultant and that you have done applied anthropological
22	research for various organizations such as the Joint
23	Federal State Land Use Planning Commission, and the State
24	of Alaska Office of the Attorney-General.
25	A Correct.
26	Q And that you are presently
27	under contract with the State of Alaska, Department of
28	Community and Regional Affairs, to write a book about
29	the effects of the Trans-Alaska Oil Pipeline on the
30	Community of Fairbanks, Alaska.



Dr. M. Dixon In Chief

Yes, that's so. 1 2 THE COMMISSIONER: How is the 3 book coming? 4 A Not as fast as I wish it 5 were. MR. ROLAND: From May 1975 until April 6 1976 you were Director of the Fairbanks North Star Borough 7 Impact Information Centre. 8 A That's right. 9 10 Q And we'll hear more about 11 that from your presentation. That from February 1975 12 to February 1976 you were consultant for World Impact -sorry, Rural Pipeline Impact Information Project, a 13 program conducted by the Fairbanks Town and Village 14 Association for Economic Development, in conjunction 15 16 with Tanana Chiefs Association and Fairbanks North Star Borough's Impact Information Centre. 17 A 18 Yes. That from September 1974 19 0 to May 1975 you were a research analyst with the Fair-20 banks North Star Borough's Impact Information Centre. 21 22 A Right. And that you did your 23 research or dissertation research in Alaska. 24 That's correct. 25 Α Between 1970 and 1973. 26 27 Α Correct. Also attached to your 28 0 presentation is a list of your publications and papers. 29

I take it that's an accurate list.



1	A I'm not sure which data
2	you're reading from, but I'd be happy to look at it and
3	tell you if it needs to be updated.
4	Q All right, and that you
5	are have been involved in other activities including
6	being a member of the Advisory Board of the Nurse-
7	Practitioner program, Alaska Methodist University.
8	A Just for the record,
9	the Methodist University has gone out of business and
0	that program has been transferred over to the University
.1	of Alaska, but I'm still on the Advisory Board, yes.
.2	Q That you assisted in
. 3	preparation of the Emergency Medical Services proposal
4	for interior Alaska, 1974-75.
.5	You were on the Steering
.6	Committee, Fairbanks Congress on Children.
.7	A M-hm.
. 8	Q That you are on the Board
9	of Directors of the Tanana Valley Chapter of the American
0	Red Cross.
1	A M-hm.
2	Q You were a volunteer
3	councillor to the Fairbanks Health Centre, Family
4	Planning Clinic.
5	A That's right.
6	Q That you were chairman of
7	the Mental Health Outreach Committee. I take it that's
8	situate in Fairbanks.
9	A Right, that's in conjunction

with the local public television station.



Α Yes. 1 And that you are a member 0 2 of the American Civil Liberties Union and the Fairbanks 3 Consumer group. 4 Yes. Α 5 Would you now read your 0 6 7 presentation? I would like to thank 8 Judge Berger and the persons associated with the Macken-9 zie Valley Pipeline Inquiry for inviting me to share 10 some of my observations of the impact of the Trans-Alaska 11 Oil Pipeline on Fairbanks, Alaska, and the role of the 12 Fairbanks North Star Borough's Impact Information Centre. 13 I find it very gratifying that other people are trying 14 to learn from our experiences 15 So that you can properly 16 evaluate my comments, I would like to give a little 17 background about myself and about Fairbanks. 18 just been over some aspects of my vitae. I'll just 19 repeat again that my academic training includes a Bachelor 20 of ARts magna cum laude in economics from Washington 21 University in 1970; and a Masters and Ph.D. in anthro-22 pology from Northwestern University in 1972 and 1974 23 respectively. I have been a resident of Fairbanks, 24 Alaska, since 1970. From August of 1974 until April 25 of 1976 I studied the impact of the Trans-Alaska Oil 26 Pipeline on the Community of Fairbanks in conjunction 27

with the Fairbanks North Star Borough's Impact Information

Centre. I also served as a consultant to the rural

impact information project of interior Alaska for the

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duration of that program from February of 1975 until
February of 1976. Currently I am on contract with
the State of Alaska's Department of Community and Regional
Affairs to write a book about the Fairbanks experience
with pipeline impact. I believe a vita has also been
submitted for further information about myself.



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The effects of a trans Alaska
oil pipeline on the community of Fairbanks may be applicable
to the Mackenzie Valley situation in some ways and not
in others. Therefore, I would like to offer a brief
summary of the magnitude of the pipeline project and
Fairbanks' role in relation to the pipeline.

Construction of the trans Alaska oil pipeline system was officially begun in April of 1974, although preliminary work began as early as 1968. At its inception, it was called the largest private construction project in history. To transport oil from Prudhoe Bay at the northern coast of Alaska, to the southern Alaskan port of Valdez requires, in addition to the construction of an 800 mille long 48 inch diameter pipe, the construction of a 361 mile gravel road, bridges over 20 major streams, a 2,300 foot bridge over the Yukon River, three permanent airfields, eight temporary airfields, 15 permanent access roads, numerous temporary access roads, 19 construction camps, eight pump stations and oil storage and tanker loading facilities. The cost of the project is now estimated in excess of 7.7 billion dollars and the estimated completion date is mid 1977.

At the peak of the construction season last summer, an estimated 22,000 people were working directly on the pipeline project. Most unions had negotiated contracts which provide for a working period of 9 to 13 weeks, with 10 to 12 hours of work each day, and a rest and recreation period of one to two weeks. This yields paycheques of \$1,000 to \$1,500 per



week for labourers and skilled craftsmen.

Incedentally, when I say paycheques, I'm talking about pay before taxes. Sometimes it comes out to be that much after taxes also.

Fairbanks, Alaska is the primary supply and administrative center for construction of the northern segment of the pipeline, that is everything north of Glenallen and therefore it is one of the communities most affected. Surplus buildings in the local army base have been converted into construction headquarters for the trans Alaska pipeline project.

Approximately 520 management personnel are located there. Additional facilities on the post are being used for a construction camp, accommodating 1,360 workers, many of whom work at the pipe storage yard located in Fairbanks.

In addition, union halls located in Fairbanks are the primary source of job referral for more than 16,000 pipeline jobs. Since the supply of available labour is greater than the number of pipeline jobs, some of the unions have waiting lists of 3,000 people or more.

According to the 1970 census, the Fairbanks North Star Borough was inhabited by approximately 45,000 persons and government was the major employer. With the commencement of pipeline construction activities, the population has swelled to an estimated 63,000 persons, in addition to the numerous transients who pass through Fairbanks on their ways to and from the pipeline construction camps or to do pipeline related business.



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Direct and indirect effects of pipeline construction upon the Fairbanks community are called "impact". To help the community cope with impact to quell impact rumors and to aid in formulating policy, the Fairbanks North Star Borough established an Impact Information Center in July of 1974. The testimony which follows gives a history of the impact information center explanations of the methods of data collection and dissemination used by the center and a brief description of how the information is used and a list of principles which I have developed for the successful operation of a programme such as the Impact Information Center. In addition, I have tried to present some of our research findings in a broad conceptual framework which may be useful to those assessing, predicting and evaluating the potential and actual impacts of oil and gas development

Just prior to the inauguration of pipeline construction activities, the Social Concerns Committee of the Fairbanks Council of Churches held a community meeting to which representatives of the oil industry were invited to describe the ways in which the communities in the Fairbanks North Star Borough would be affected by the construction activities. This meeting provided a forum for public discussion in which there was an expression of need for additional and on-going information about the affects of pipeline activities on the local communities. The Social Concerns Committee, along with other concerned individuals organized support for an Impact Information Center as



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part of the Fairbanks North Star Borough government services.

Charles Parr, who was then presiding officer of the Fairbanks North Star Borough Assembly, developed a schematic for such an office.

Mr. Parr envisioned a center whosepurpose is to collect and disseminate information,

"it does not forecast, predict, project, extrapolate, or otherwise attempt to indicate the shape of the future."

ending that quote from his schematic.

According to the schematic,

"The sole measures of success of the

Impact Information Center will be how

well it serves the whole community: the

businessman deciding whether to expand

his operations, the man who builds three

houses and sells them each summer, the

senior citizen on a fixed income who must

decide whether or not to leave for the

lower 48 because of prices, the school

authorities want to know how many teachers

to hire, hospital administrators with

staffing problems, Goldpanners who may need

additional seating in the ball park, and

welfare recipients whose incomes always lag

behind the rising cost of living."

THE COMMISSIONER: Excuse me.

A Yes?

O What does that phrase,



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"goldpanners who may need additional seating in the ball park" --

A All right. The Goldpanners

are the local baseball team.

Q Oh.

A I should have clarified

that.

Borough Mayor John A. Carlson supported the idea in a memorandum to the Borough Assembly in which he further refined the concept of an Impact Information Center. He defined three basic purposes for such a center.

One, to provide the general public with information relevant to pipeline activity which could or will affect their personal, occupational, business, financial and recreational affairs.

Two, to provide the borough assembly and administration with "factual data to aid them in conceiving and formulating public policy designed to cope with pipeline impact" and to present information as a rationale to support requests for state, and possibly federal impact funds or services. There were no federal impact funds forthcoming.

The mayoralso recommended that a broadly based steering committee be appointed to guide the proposed impact center.

On April 25th, 1974, the Fairbanks North Star Borough Assembly appropriated 13,450 dollars from the general fund to the Mayors office for the purpose of establishing an Impact Information Center and



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operating it for the remainder of the fiscal year. The Borough Assembly later decided to use a portion of the impact funds received from the state of Alaska to support the Impact Information Center, and thereby appropriated an additional 49,198 dollars to operate the Impact Information Center during the fiscal year 1974, 1975.

The original Impact Advisory

Committee, appointed by the mayor to guide the Impact

Information Center, represents a cross section of the

community, including the chairman of the Social Concerns

Committee of the Fairbanks Council of Churches; President

of the Fairbanks Chamber of Commerce, Community

Relations Representative for the Alyeska Pipeline Service

Company, Vice President of Doyon Ltd., the regional

Native corporation for this area and Presiding Officer

of the Borough Assembly. Later the committee was

expanded to include a consumer representative, a

representative of the black community and a representative of the Joint Labour Council.



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Since the original committee
was formed, there have been several changes in membership
but the broad representation of various parts of the
Fairbanks community has been maintained. At its
inception the committee met with the Impact Information
Centre staff, the press, and the public two times each
month. Later the public meetings were held once a
month. The Advisory Committee reviews and critiques
the publications of the Impact Information Centre,
suggests topics for research, and provides a public
forum for discussion of impact phenomena.

The I mpact Information Centre began with a two-person staff. Joe LaRocca, a veteran political journalist was the Information officer, assisted by a secretary. Shortly after the office began, I joined the staff through the use of CETA (that's Comprehensive Employment Training Act), a federal program to combat unemployment. Eight months later the Impact Information Centre had proved itself and it was decided that there was a need for a Rural Impact Information project for the interior of Alaska outside the Fairbanks North Star Borough. By contractual arrangement with the Impact Information Centre, I also served as a consultant to that rural program.

At the end of the first fiscal
year of the Impact Information Centre, the state impact
funds lapsed and the Borough Assembly decided to
appropriate the funds out of general revenues to continue
the program. The State of Alaska ascertained that the
Impact Information Centre was providing valuable



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include the following:

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information to state agencies and decided to add 2 \$10,100 to the Impact Information Centre budget. 3 Additional funds were secured through contractual services 4 with the Rural Impact Information project. At that point 5 till LaRocca departed, I became director and/secretarial 6 position was amalgamated into an information assistant 7 position with responsibilities for working with the public 8 and assisting in research as well as clerical duties. 9 At the end of the second 10 fiscal year of operation for the Impact Information 11 Centre last June, the Borough Assembly once again 12 funded the program with a budget of approximately \$60,000 13 for the 1976-77 fiscal year. I resigned from my 14 position in April to write a book about pipeline impact 15 in Fairbanks, and Sue Fison became director of the 16 Impact Information Centre. Among other recent developments 17 the Fairbanks North Star Borough received a 1976 New 18 County Achievement Award from the National Association 19 of Counties for the Impact Information Centre. 20 A major activity of the Impact 21 Information Centre is to cdlect information about the chan-22 ges in the community which may have resulted directly or 23 indirectly from pipeline activities. A variety of 24 methods have been used to collect community data.

1. A reporting system has been established in which local and state agencies send copies of their regular reports to the Impact Information Centre. This includes such items as traffic counts, airport activities,

Consumer Protection AGency caseloads, and so forth.



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- 2. The local newspaper and other major newspapers within the state are reviewed daily and a file of newspaper clippings relating to the community, the impacts of the pipeline, and energy resource development is maintained.
- 6 3. The Impact Information Centre receives studies,
  7 reports and articles about Fairbanks and serves as a
  8 library for that information.
  - 4. Regular market basket surveys, heating-oil cost surveys, and surveys of rental prices advertised in the local newspaper are conducted to establish economic indices. In addition, information obtained by the Bureau of Labor Statistics in its Anchorage Consumer Price Index is utilized. A major activity of the Impact Information Centre and its Advisory Committee has been to encourage the re-establishment of a consumer price index in Fairbanks. So far, however, this has been an unsuccessful endeavor.
  - 5. Public records are also used to obtain data. For example, by utilizing dockets from the Alaska State Superior Court, filed divorce complaints are recorded monthly and information from previous years is being collected in order that a time series analysis may be possible.
  - 6. Interviews are conducted with local persons to obtain information on a variety of subjects, and local institutions are visited and observed.
- 7. Public meetings and hearings are attended to obtain both information and public expressions of sentiments.
  - 8. Formal questionnaires are used occasionally to



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obtain information on specific problems, such as the survey of High School students to determine their roles within the work force, a survey of senior citizens to ascertain their pipeline-related problems, and a survey of local pipeline-related workers to determine their child care needs and solutions. Currently the Impact Information Centre is conducting a survey of mobile home /which should be available very shortly. 9. Local university students are encouraged to study impact phenomena. Their work is supervised and co-ordinated through the Impact Centre, and the Centre acquires copies of completed papers. 10. Impact Information Centre staff participate in local groups, give speeches at meetings of various organizations, are interviewed on radio and television talk shows, and participate in community activities and other ways which help to create a positive impact and a sense of trust which facilitates an informal communications network. 11. As the Impact Information Centre has become recognized as a community resource, persons in the community or elsewhere with questions, problems, or information contact the Impact Information Centre either by telephone or going directly to the Centre. Persons in the community provide information not only in terms of data but also by alerting the staff to community

Research methods are flexible and strive for the integration of qualitative and quantitative data. The financial and political



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constraints on the Impact Centre prohibit a large-scale research team which could provide greater depth of information. However, the relatively small size of the community and the unique vantage point provided by the research setting permits a holistic view of changes in the community .



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I would like to talk for a few minutes about methods of disseminating information. Until recently, the Impact Information Center has been located in a store front office in the heart of downtown Fairbanks. Right now it has been a temporary quarters and it is about to move again however. It serves local citizens seeking information or referral: businessmen, State and federal agency people, journalists and other interested people, including a variety of Canadian groups associated with the Berger Inquiry some of whom I recognize here today. Information collected by the Impact Center is disseminated in several ways. People call or visit the Center, some information is exchanged through correspondence and the staff of the Center gives speeches and presentations to the groups in the Fairbanks area. Much information is disseminated through the news media coverage of the monthly Impact Advisory Committee's meetings.

The major focus of activities and the major source of dissemination of information is through the publication of regular reports. In the 26 months that the Impact Information Center has been in existence, it has produced 29 regular reports which cover over 100 topics, including such areas tax revenues, highway traffic, airport activities, population estimates, prices, housing, crime, employment, youth and many others. In addition, three special reports have been prepared:

"Alaska Hire and Minority Hire on the Pipeline",
"Senior Citizens: The Effects of Pipeline Construction on Elderly Persons Living in Fairbanks", and "Questions"



and Answers About the Cost of Living in Fairbanks".

These reports are distributed to borough administrators and assemblymen and to other persons upon request and to persons who have requested that their names be placed on the mailing list.

By May of 1976, approximately
725 persons have requested that their names be placed on
the mailing list for Impact Information Center reports.
Surveys of report recipients indicated that on the average
each copy of the report which was mailed was read by 3.3
persons in 1975 and 3.1 persons in 1976. The distribution
of the reports through the mailing list is given in the
table prepared in August of 1975 when 585 persons were
on the regular mailing list and I assume this table will
be submitted for evidence.

It shows that 60% of the reports remain in the borough. Another 22% are sent to places inside Alaska but outside the borough. 18% are sent outside Alaska. The largest percentage of recipients of this report is the private citizen who receives 39% of the report. Business and other organizations, 35%; the university 11%; State agencies, 10%; federal agencies 6% and the press, 3%.

Along with this testimony, I have submitted copies of the Impact Information Center reports to the Berger Commission. Of course, I shall be happy to answer any questions about the contents of the reports and the methods used in obtaining and analyzing the information contained therein.

A survey of Impact Information



Center report recipients in January, 1975 in which 50% of the recipients responded, indicated that 77% of the respondents had actually used information contained in the reports. Respondents indicated that they had used the information for planning and decision making; as references in hearings, reports and research; for news reporting; in agency reports; to support budget requests; and to let persons considering moving to Fairbanks know what to expect.

A follow-up evaluation questionnaire was distributed in January 1976. Those returns
indicated that the information in the Impact Information
Center reports is being used in nearly every area of the
community: to certify the need for additional hospital
services, to project church needs in Fairbanks; to help
banks in economic forecasting; to assist in real estate
appraisals; to make school enrollment projections and
decisions about routing school buses; to aid in employee
recruitment and as the basis for wage scales and
employee benefits; to support requests for fair computation
of medicare reimbursements to the elderly; to provide
evidence for those writing environmental impact statements; to help citizens decide how to vote on local
bond issues; and in numerous other ways.

One of the most dramatic
effects of the Impact Information Center activities has
been the responsiveness of the State Government to problems documented in the Impact Information Center reports.
The Lt. Governor and nearly every State Commissioner as
well as local officials and agency personnel joined

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350 or more local citizens to discuss pipeline impact problems at a one day community forum on growth sponsored by the Social Concerns Committee of the Fairbanks Council of Churches in April, 1975. The former chairperson of the Impact Advisory Committee and the director of the Impact Information Center were active organizers of the forum.

Shortly after the special

report on Alaska hire and minority hire was issued, for another example, the State Commissioner of Labor called the Impact Information Center to say that he had made a list of all the problems outlined in the report. He felt that the criticisms were valid and assigned his staff members to address each of the problems. Shortly thereafter, the State Department of Labor announced a new program for more effectively accomplishing the local hire provisions stipulated in the State laws. In another example, after the Impact Information Center had documented the need for more sanitarians in the Fairbanks area, the Governor immediately funded that portion of the budget request from the State Department of Health and Social Services.

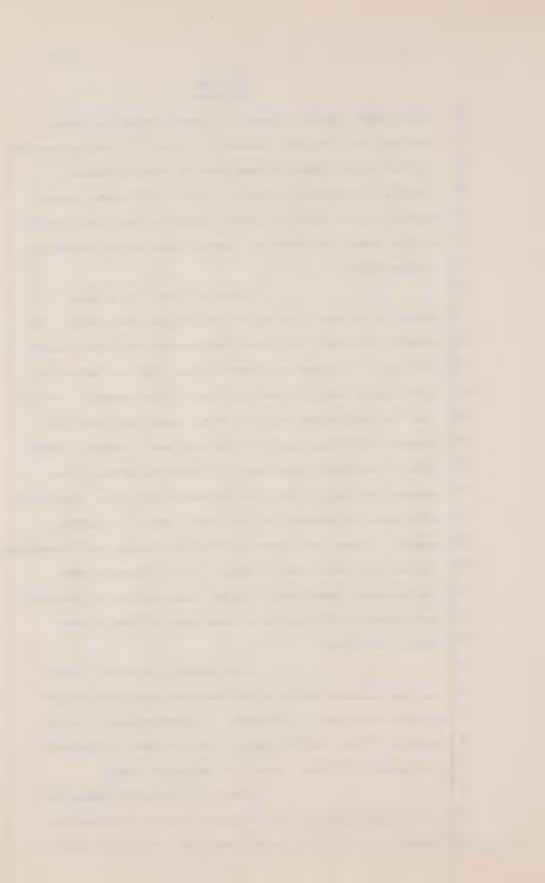
Unfortunately however, those sanitarians were never hired because there was not any housing for them in Fairbanks. Nevertheless, it's an example of how the information can be used to transmit the urgency of local needs to the State level.

Based upon my experiences with the Fairbanks North Star Borough's Impact Information Center, I would like to suggest some principles basic to

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the successful operation of such a program. Fundamental to these recommendations is the fact of life that the Center is subject to local control and therefore, local politics. Another fundamental premise is that the effectiveness of the Center is dependent upon its credibility and ability to communicate findings.



These, then, are my suggestions:

Consider every group and individual in the community as part of a special interest group, whether or not it appears that they have the community interest at heart rather than personal interests. To avoid community politics and gaining general acceptance it is important not to be identified with any single special interest. This may be accomplished by balancing activities with some types of special interest groups in the community with attentions to opposite types of interests. Types of special interest groups in the community might include business and economic groups, church or social activist groups, conserva-tionists, academic or university types, labor or union people, and ethnic groups.

- 2. An Advisory Committee or Board of Directors composed of representatives of broadly based segments of the community is vitally important. This gives the organization more credibility and distributes the responsibility for activities to people who are known and respected in the community. In order for an Advisory Board to be effective, it must include representatives of potentially critical organizations.
- 3. To maintain credibility, it is imperative to limit activities to disseminating documented information, to minimize interpretations, and to avoid projections.

  Based upon accurate information, others can draw conclusions, make predictions, suggest policy, and recommend planning. If the applied social scientist or other person in charge of such a centre is asked to



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1	become involved in the planning process, it is best
2	to offer several alternatives explaining positive and
3	negative aspects of each. In other words, the social
4	scientist or director of such a program does not
5	become a political threat if he or she lets somebody
6	else take the responsibility for decision-making.
7	4. If the information is to be used, it must be
8	presented in a clear and understandable manner. Infor-
9	mation is more likely to be used when written narratives
.0	are kept to a minimum and charts and graphs are
1	employed when appropriate. Statistical analysis
.2	is difficult formany people to interpret and concept-
. 3	ualize. It is far more effective to present quantitative
4	information using numbers and percentages. Social
.5	scientists who find this threatening to their sense of
16	academic competence may prepare two reports a detaile
L7	report for personal use and for people with specialized
8	interest, and a more general and brief report for
L9	the public. In effect, we did this on several
20	occasions. We prepared a detail report for people that
21	we felt were interested in details andthen summarized
22	it in our regular report.
23	5. Vocabulary is exceedingly important. Words with
24	neutral or positive connotations in academia or other
25	circumstances can have negative connotations in the
26	community context. It's important to try to understand
27	community attitudes and political sensitivities and
28	selectwords that will not evoke hostilities.

In most cases, the business/
economic interests dominate politically. Explanations

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which include concepts which are understood by the economic interests and which incorporate their values are more likely to be accepted. For example, "tax-payers' dollar" is a phrase that is often used by politicians, and it's one that no doubt everybody here hears quite often too, and I think this can also be used effectively in an explanation to the general public.

- 6. is a suggestion particularly for people who are running these kinds of centres, that you don't always have to be right. It's important to try to avoid inaccuracies and mistakes; but if somebody in the community accuses you of being wrong, it's important not to become defensive. I think it's important to remember that that person is becoming involved in the project and to encourage his or her participation.

  That person is a source of information and to seek the additional information that he or she has to offer.

  Criticisms from the Advisory Board gives them a reason for being. If you are always right, that means that they are powerless.

  Your credibility is much more a function of process —
- is as much a function of process as it is of content.

  It's important to concentrate on developing strong relationships rather than strong arguments, and not to worry about being embarrassed by mistakes because we all make mistakes.
- 7. News media seek sensational stories and quotations, so it's necessary to learn how to use the news media without letting them abuse you.



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is to be aware of the hierarchy within a system 8 . that this centre is operating in, and to keep administrative persons posted on activities and consult with them on decision-making matters, not to consider this project to be outside the system. I think it's possible to do this and still maintain a fair amount of autonomy. 9. To maintain autonomy, I feel that it is important not to accept funding from any source which may directly benefit or be harmed by the potential results of your research. Even if the money is offered with no strings attached, other people in the community will assume that the source of funding may bias the results and therefore the credibility of the program may be damaged. For example, the Impact Information Centre never sought money from the oil companies and it is my opinion that to do so would have been both inappropriate and detrimental. There is a tradeoff between research effectiveness

10. There is a tradeoff between research effectiveness and community acceptance in terms of size of the program. The Impact Information Centre could have been more effective at data-gathering and analysis if we had had a larger staff. At the same time, a larger staff would have created an image of a burgeoning bureaucracy which used taxpayers' dollars in a wasteful manner. For different communities there are probably different combinations between the staff size appropriate to the task and the budget for which it is perceived that tax dollars are being used efficiently and effectively. One way to make a better program is to create more effective systems of data-gathering



at the state and federal level of government.

I'd like to spend just a few minutes talking about research findings.

Because Fairbanks is substantially larger than most of the communities which may be affected by a gas line through Canada, and because the proposed plans for a Canadian gas line are significantly different from the Trans-Alaska Oil PIpeline, it is likely that specific impacts experienced by Fairbanks may not be applicable to the Canadian situation which you are examining. For this reason, and because the Berger Commission has been given copies of the Impact Information Centre Reports which relate the details of pipeline impact, I have chosen to summarize our research findings in terms of broad patterns and pro cesses rather than specific events. I think this may make our research findings more useful to you. Because my own training the concepts I have chosen for explaining these patterns and processes are largely anthropological.

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The first concepts is that of carrying capacity. One approach to explaining the process by which the local group adjusts to changes in the micro-environment such as a major construction project like an Arctic pipeline, is through the concept of carrying capacity. To summarize briefly here the concept implies a relationship between population and resources. In the urban setting, resources must be defined to include the following:

- 1. Food
- Cultural constructs for survival such as shelter,clothing and medicine
- 3. That which permits the distribution of resources which are not immediately procured by the local population, for example, transporation and communication
- 4. Cultural constructs which provide social integration through which large numbers of persons can live together. This would include government, law enforcement, socializing institutions such as schools and churches and so forth, and,
- 5. Knowledge which enables people to function and survive in the cultural-ecological setting. This would include both science and leadership.

In urban areas, as well as in subsistence and agrarian economies, intensified or improved technology can increase the amounts of resources available to a population at a given time. The carrying capacity for each of the component resources is defined as the population density at which the demand for that resource exceeds the capacity of that resource at its



current level of technological intensity and thus results in disintegration or an inability of that resource to function in its designated role.

One of the more dramatic impacts of pipeline construction on Fairbanks has been that the population has exceeded the carrying capacity of many of the resources. For example, people are unable to obtain new telephones and the exisiting telephone system is now functioning most of the time. The necessary technology to increase the switching capacity of the telephone system takes two years to obtain and install. Similarly, electricity consumption has exceeded the generating and supply capacity of the local electric company. People may no longer obtain electric heat in their homes, there are lengthy delays in obtaining new electric hook-ups and electric outages are not uncommon. The electric company's inability to meet the needs may result in planned periodic blackouts in different areas of the community to reduce the electric load. Housing, for another example, is filled beyond capacity and new housing construction is inadequate to meet the needs. This has resulted in exhorbitant rents and the changing residency patterns.

When their carrying capacity has been exceeded, resources experience disintegration. To some extent, the community collectively experiences disintegration and reintegrates into a new or changed community. By measuring the carrying capacity of various resources, it may be possible to predict the levels at which disintegration would occur from additional demands

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created by introducing projects such as the Trans Alaska oil pipeline into the micro-environment.

Another concept that we have been able to work on and develop is that of the structure of the community. The ways in which change occurs are dependent upon the structure of the community at the time in which the new force is introduced into the micro-environment.

Before the pipeline construction began, Fairbanks was a small town which was relatively isolated and which had managed to maintian a fairly constant, social political, and economic structure.

Anchorage by comparison, was a fast-growing town which had been experiencing change prior to the pipeline and was more flexible. Thus, Anchorage absorbed pipeline impact with less trauma than Fairbanks. Some of the changes by brought about the pipeline in Fairbanks included:

- A Changes in the political structure. For example:
- 1. New groups have formed
  - 2. New individuals within old groups have changed the power structure of those groups, and,
  - 3. New problems and goals have re-defined alliance networks.

There have also been changes in social structure.

- patterns of participation in voluntary groups have changed.
- greater employment opportunities have increased socioeconomic mobility for some groups, especially teenagers,
  native people and women.



- The roles of social service organizations have changed so that there is less dependence upon government and a greater role for religious organizations in providing social services.

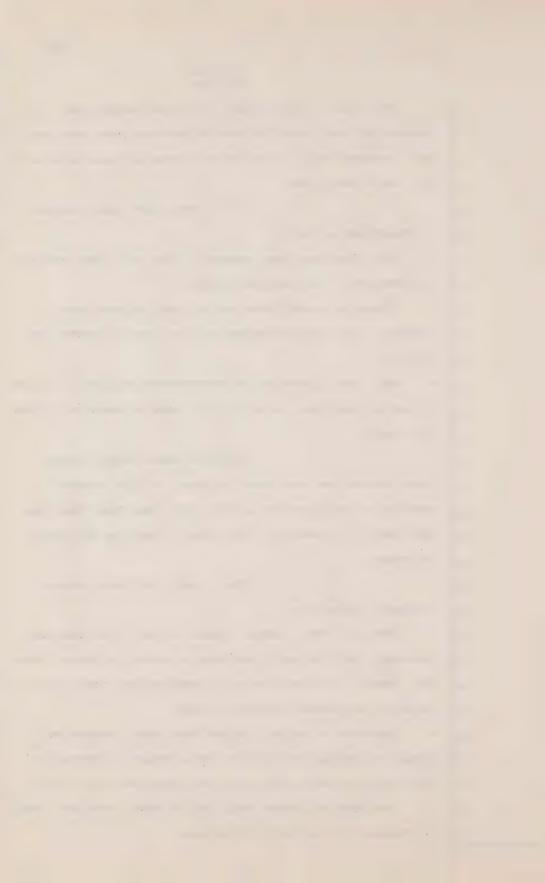
Also, there have been changes in residence patterns.

- More families have persons living with them who are not members of the nuclear family.
- There is a proliferation in institutionalized communal living arrangements such as rooming houses and hotels.
- And a proliferation of non-conventional housing such as tents, trailers, cars, shacks, mobile homes; all kinds of things.
- Pipeline construction camps have created new residency patterns in that persons working on the pipeline reside away from their families for nine to 13 weeks and with their families for one to two weeks.

There have also been changes in Family structure.

- Some of these changes result in part from changing residency patterns such that when a person is absent from the family for the nine to 13 week period, the spouse and children may assume different roles.
- Patterns of caring for children have changed as a result of double-shifting in the schools, a shortage of institutionalized child care and longer working hours.
- Teenages and women entering the work force may result in changes in the family structure.

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- Divorce rates have been four to eight times greater since pipeline construction began.

These of course, are only some of the changes in the structure of the community since pipeline construction began. At this time, it is not known whether these changes will have short term or permanent consequences.

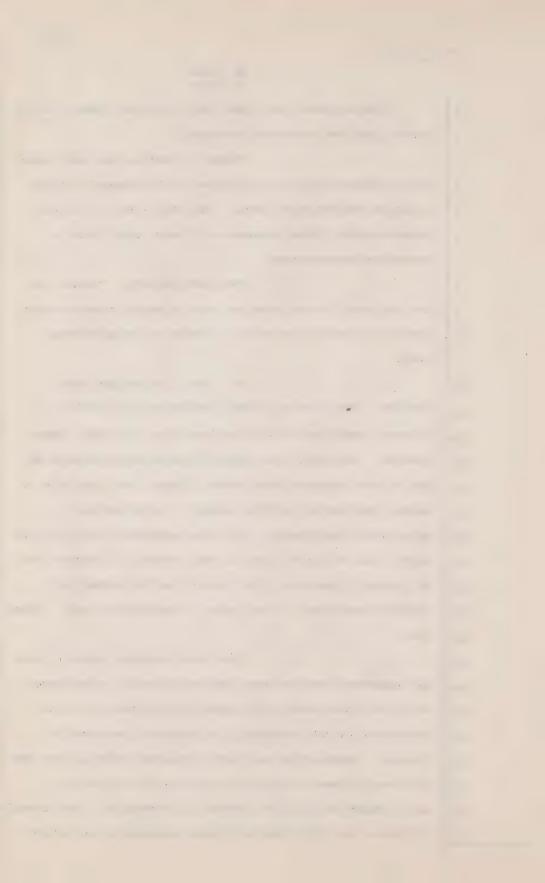
THE COMMISSIONER: Excuse me, how can the divorce rate be four to eight times greater?

Isn't it possible to tell? I don't quite understand that?

shouldn't say divorce rates, let me say the number of divorce complaints filed has been four to eight times greater. We don't know about divorce rates because we don't have accurate population figures that can help us assess whether or not the number of divorces per population has gone up. But the population has not gone up by four to eight times as the number of divorces had. So properly speaking, that should be the number of divorce complaints filed rather than divorce rate. Thank you.

The third concept which I think is important that we have learned from our experiences with the Trans Alaska oil pipeline has been that the community is not necessarily a passive recipient of change. Communities may make decisions which affect the micro-environment which in turn affects the macro-environment which then affects the community. For example, Fairbanks and the State of Alaska engaged in an active

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immediate campaign to discourage people without jobs from coming to Fairbanks and thereby reduced or averted some of the potential problems.



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Fairbanks has some of the strongest temperature inversions in the world, which have created severe air quality problems. There was fear that the increased traffic resulting from pipeline impact would intensify the carbon monoxide and ice fog conditions. However, a plan to improve air quality which included changing traffic patterns downtown served to reduce carbon monoxide in the core area despite the pipeline related traffic which has been as much as more 130 percent in some areas than prior to the pipeline.

In conclusion, I would like to address a question which is often asked of me and for which my answer is often misinterpreted or -- and/or misquoted. The question is, overall, do you think that the pipeline has been positive or negative for the people of Fairbanks?

in my testimony that my approach to assessing impact is that of a social scientist who is concerned about documenting facts and understanding processes. In order to do this, I have tried to eliminate value questions such as "positive or negative", from my work. It is quite apparent to me that what is positive to one person or group of persons can at the same time be negative to another. For example, the high wages paid to pipeline workers are positive to those employed on the pipeline and negative for those on fixed incomes who must cope with inflationary effects of such high wages.

It is my opinion that the

I hope that I have communicated



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overall effects of the pipeline on the community of Fairbanks cannot be adequately assessed for a few years until after all the data is in and there is some understanding of the long-term implications. At the same time, I realize that you are faced with making a decision which involve values. I welcome you to use the information which we have prepared in making your decisions, but I caution you to be conscious that the values which you apply to the information are your own.

I am quite willing to accept the responsibility for the quality of the information and the methods used in obtaining it, the responsibility of making value judgements about that information rests with the user.

I'd be happy to answer any questions about this testimony, about the reports which I've submitted, or other questions about the impact of the pipeline on Fairbanks. Thank you.

thank you Dr. Dixon. I think we'll adjourn for lunch and come back at 2:15 and then we'll see about the questions, okay? Thanks.

(EVIDENCE OF DR. M. DIXON MARKED EXHIBIT 688)
(PROCEEDINGS ADJOURNED TO 2:15 P.M.)

#### (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT)

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MR. ROLAND: Q Dr. Dixon, before we begin cross-examination, let me ask you just a couple of short questions. One of the basic functions of an Impact Centre is that you compile data and information, and you've mentioned this in your presentation. You also mentioned that there's some difficulty in obtaining data and information and in putting the data obtained to useful work, and I would like you, if you would, to let us know what useful help the Federal Government in Alaska, or the State Government, or the pipeline company, would be to the Impact Centre in assisting the centre in obtaining this information and making it available in some useful form?

A O.K., let me break down your question into a couple of components. One would be what our experience has been, and what kinds of recommendations I could make based on that experience would be the other one.

Let me begin with the oil company. What they have done in terms of providing information to the Impact Information Centre has been relatively minimal for a number of reasons. One is we were studying impact of the pipeline on the community and not the actual pipeline company's operations. So we didn't really go to them for very much information. But also they didn't view their role as providing us with information either, and in many cases I think that the pipeline company views itself as a private



business whose records are not open to the public, and didn't really see any responsibility for providing information, and it was more on a basis of, "We will be, you know, we will do it as we feel like doing it, or as a gift to you rather than as a responsibility."

What they did do is they conducted a family survey which, when people went through the orientation period they handed out a little slip asking them if they planned to move their family to Pairbanks, and if so, how many children were in the family and what ages those children would be in the school system. We asked them to do a more comprehensive survey to help us understand the characteristics of the labor force, and they refused to do this because they said it would be an invasion of the worker's privacy.

They also provided us with information on an irregular basis on request. For example, we asked for information about the amount of money that the pipeline company spent in surveying each day, and they did compile that for us at one point, but there was no -- it took quite some time to get that kind of information from them. Similarly we have asked them to provide information on housing needs and the amount of housing that was being purchased locally and what they were supplying, and they did provide this information.

They also did participate in the Impact Advisory Committee, and in fact the representative from Alyeska Pipeline Service Company



has been very regular about attending the Impact Advisory Committee meetings.

What could be done, I think, that would really help us understand better what was going on with impact is that the oil companies could have provided regular work force summaries by location, trade or craft, and by contractor. Now, by law they are forced to provide that information to the state and federal monitoring agencies. The state for the purposes of monitoring Alaska hire percentages, and to the Federal Government for purposes of monitoring minority hire percentages. However, we had to go through those state and federal agencies in order to get the information, and in fact even though the oil companies had reduced some of the information into very short forms which would have been useful, we had to go to the office Equal Opportunities in Anchorage and go through these very lengthy computer print-outs and essentially reduce the information ourselves in order to get ahold of it.

So you know, it would have been much more helpful to us to get this type of information on a regular basis, and in a form that would be more usable.

Also as I mentioned, regular reports on the percentage of local hire, the percentage of minorities, and the percentage of females in the work force; also it would have been helpful to get regular reports on job training activities.

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as it sounds, I spent a week in Juneau and another week in Anchorage for the specific purpose of trying to find out how many people were trained for what kinds of jobs, for the pipeline, at what cost, and nobody has that information. I suspect that the pipeline companies might have a little bit more of the information than anybody else, but that information is not public information at this point. The people even involved in the job-training programs at state level don't have that information.

Also another kind of information which would be helpful in terms of the local community would be regular reports on the numbers of people who have been evacuated from pipeline camps for medical emergencies, and the type of health care or health care facilities which they require. We've had a very difficult time just finding what percentage of the increased utilization of the hospital in Fairbanks, which is being used to capacity, is directly attributed to pipeline-related accidents and so forth.



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And similarly deaths on the pipeline is something that is not made official information. Also, as I mentioned, I feel that the pipeline companies could have co-operated in a survey of those hired to determine the characteristics of the labour force. Such information as the age, the marital status, the number of dependents, the location of the dependents and the previous work experience of the people hired on the pipeline would help improve our understanding of this migrant labour force, which, in a sense is a part of the whole impact situation that we have a very negligible understanding of.

Also, it would be especially important to have regular reports and updated projections of the needs in terms of local labour force, housing, warehouse and office space, supplies and other needs which will create demands on the local community. This is something that I think was being addressed this morning. Part of the problem is that the local businessmen in Fairbanks have no way of anticipating what kinds of demands might be placed on them. Consequently, their inventories aren't accelerated to the point that they can both respond to the pipeline needs and to the local communities needs.

I'd like to move now onto the aspect of state government. We've had a lot of problems obtaining information from state government, which stem in part from the structure of the organization of state government. For one thing, most of the agencies aren't



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data collection system, this is usually a low priority for them and the records are kept in a hap-hazard and

in the business of providing information, they're in the business of providing services and they simply don t keep track of a lot of the types of information that we would find helpful . In addition, agencies have different district boundaries which means that data from different agencies is not comparable. I'll give you an example, the State Troopers district, which includes Fairbanks, goes from Tok, at the Canadian border all the way up to Barrow at the northern border and at the same time, say the Department of Health and Social Services district, which includes Fairbanks, includes an area larger than the Fairbanks North Star Borough up to the Yukon River and south as far as Other state agencies might have an office Tok. specifically in Fairbanks to serve the Fairbanks population, so, when we get figures from these agencies it's very hard for us to analyze what they mean because they cover different districts.

Agencies often do not monitor their own activities and when they do it's most likely to fulfill their requirements for federal contracts. In other words, they're not monitoring them to find out what the demand is for their services and how well they're meeting that demand, they more likely do it according to what kinds of reports they're being forced to submit in response to federal requirements.

When agencies do have a



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inconsistent manner. In other words, a social worker views his or her responsibility as helping a person, sitting across from them, solve their problem, not shuffling papers and when they're asked to fill out forms, they often give this a low priority and don't do it in a very conscientious manner.

When records are kept, the data is often unretrievable because it's not computerized or otherwise well managed and this means that there might be a stack of forms this high with the data on ... it but nobody knows how to extract the information from it or somebody knows how but nobody has done it, and even when the information is computerized, it's usually only retrieved once a year and this is at budget time to support a budget request and this doesn't enable us to monitor what's happening over a -- consistently over a period.

In order to make data of that impact phenomenon meaningful, it is necessary to have both one time depth in the data so that we can distinquish long term trends that have been developing through the results of a specific development. So, even if they started today to keep the data, to monitor the impacts /the pipeline, we'd also need to go backwards in time to see what can be attributed to this specific event as compared to a trend that had been building up over time.

And secondly, as the Judge brought up, a reasonably accurate census is needed in



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order to distinguish changes directly related to population growth from changes resulting from impact phenomehon. In other words, we need to be talking about rates of change rather than absolute numbers so that the data can be meaningful.

Well, these are a lot of problems to deal with in terms of getting information from state government. My suggestions would be that if the agencies cannot redistrict and maybe that is bit a little/too much to ask, just in response to a given project like this, although I don't think it's a bad idea for a lot of other reasons, they could collect their data in units which can be useful to local communities. For example, even if an agency has a territory that is quite large, within that territory they should be able to break down their data collection systems to the local community level and then also have something for the larger area.



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# Dr. M. Dixon In Chief

1 Secondly, agencies should work with social scientists and/or impact assessment 2 3 personnel to accomplish the following tasks. To inventory the existing data sources so that we 4 1. 5 know what is available, what kinds of forms people are 6 using and what kinds of data might be there already that 7 we could be drawing upon. 8 To determine which types of data would be most useful to both impact assessment and to the agencies' 10 internal affairs. In other words, we are not trying 11 to ask the agencies to do something just for us. 12 feel that if information is going to be meaningful for 13 us, it should be meaningful for them too. 14 It'd like to give just a little We found that the number of food stamp 15 example of that. recipients in Fairbanks declined by 90% during the 16 pipeline period and we wanted to know. Well it is my 17 18 feeling that the Department of Health and Social Services 19 which administers the food stamp programs ought to be just as interested in knowing why and appropriating the 20 appropriate personnel and so forth to meet the change 21 So it isn't just for our benefit to find out 22 in needs. but to 23 theirs too so that they can plan why this happened 24 for other projects. 25 When I went to talk to the 26 Commissioner of Health and Social Services, he of course 27 was very interested. Only we had found that information months before

sometimes even though it would be in the interest of

that there had been a decline even by 90%.

several'I got a chance to talk to him. He had no idea

So I think



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in an appropriate way.

3. I think that this joint effort is needed to set up an efficient data collection and retrieval system. I suggested efficiency because I think that if we make too complex a system that people are not going to want to cooperate and it will be very difficult to make it work. I think that some kinds of systems that can be set up without requiring very much more in terms of time, energy or money is just a matter of setting it up

agencies, they don't even know what is in their own

interest sometimes. That sounds terribly paternalistic,

- 4. I feel that this combined effort should be directed towards monitoring activities on a regular and appropriate basis. In other words, this could be monthly or quarterly or it could be according to some structure of activities within that particular organization so it would be appropriate. And,
- 5. To develop time depth in the data collection system so that once you set up a system, you are not only working forwards in collecting data on this regular basis but you are also organizing your data in a historical sense to go backwards so that you can develop long-term trends.

My third suggestion, even though it sounds like I have made more than three in terms of State Government is that administrators at the highest levels must understand the need for data collection activities and give them a sufficient priority to enable the program to be carried out within their acencies. I think that if the people in



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## Dr. M. Dixon In Chief

charge don't look at this as an important activity, that certainly the people under them won't. So I think it's important to work with these administrators and educate this them into the importance of why'data is needed and could be helpful.

I don't know if this follows in terms of the State responsibility or Federal responsibility and I don't know in Canada if this would be provincial or territorial or federal. But I think when needed that it's necessary to conduct a census rather than only every ten years as we have in the United States.

As for the Federal Government,

many of these suggestions for State agencies
which I enumerated also apply to the Federal Government.
I won't go back through those again. In addition
however, I think that the Federal Government can make
certain significant contributions to our data collection
activities. These would include census activities as
I mentioned before -- particular in the larger
communities. I think in the small communities sometimes

agencies can -- or the communities themselves -- can do the census. But in the large communities like Fairbanks, there needs to be a more systematic approach that can only be done through the Census Bureau.

Second, we have really found a very great need for a cost of living survey. Inflation has been a root problem for many other problems. We don't really know what the rate of inflation has been during this pipeline period. In the United States, the Bureau of Labor Statistics which is part of the



### Dr. M. Dixon In Chief

U.S. Department of Labor has established methods for collecting cost of living information and that would have been very useful to us to try and have that information for Fairbanks. We've certainly been trying to get that type of information but we've been unsuccessful at doing that.



Dr. M. Dixon
In Chief
Cross-Exam by Sigler
The third thing that I think

the Federal Government can do towards making a contribution to understanding impact and monitoring it is to provide support and encouragement for the development of social science in areas of impact assessment and I think this can be done through both—support of specific research projects and through training programs for specialists in this field which there just aren't—very many right now. I think the state of the science is in very poor shape and really needs quite a bit of work. Does that answer your question?

MR. ROLAND: Thank you very

much. Mrs. MacQuarrie?

MRS. MacQUARRIE: No questions.

MR. ROLAND: Mr. Sigler?

CROSS-EXAMINATION BY MR. SIGLER:

Q Does the centre monitor state-wide activities or just the activities affecting the borough?

A Yes. The Fairbanks

North Star Borough's Impact Information Centre, to

which I've been referring to primarily, is funded by

local government, meaning the borough, and is specifically set up only to monitor activities in the borough,

and I think it would be very helpful to have state
wide monitoring and in some cases we've tried to do

some comparative work but because of the funding and

political constraints and so forth, it's just been

monitoring the borough, except in our contractual



Dr. M. Dixon Cross-Exam by Sigler

arrangements with the rural impact information project which did some kinds of monitoring activities for the rural areas in interior Alaska.

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Q Are there any other boroughs that have similar centres?

A In Alaska during the pipeline period there have been three Impact Information projects similar to the one that I discussed.

One is the impact on the North Star Borough. One is the Rural Impact Information project for interior Alaska that I've also mentioned; and the third is the Copper River Impact Information project which was conducted in the Copper River Delta area.

In addition to that, there's a few other studies that might be noteworthy, and I'll just mention them for the record. Some socialogists from the University of Alaska in An chorage, under the leadership of Dr. Michael Baring-Gould have conducted studies in the Town of Valdez, and most recently a type of information that's just coming out is a study that's being conducted by Dr. John Kruse at the University of Alaska's Institute for Social & Economic Research, and he's been doing an attitudinal study, a survey of approximately 400 or 500 families in the Fairbanks area. That, I think, compliments the work that we've been doing very nicely but it's not, you know, for a different area. So those are the major studies that have been conducted and I'm sorry to report that there isn't more, at least that I am aware of.



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You would recommend, 0 if it was starting again now, that there be a statewide monitoring centre or Information Centre?

Α The only thing, there was an intent -- I should back up and say there was an attempt in this direction at one point. Infact the Federal Government loaned a federal employee to the state set up a state-wide impact information project, and he was on loan for two months and essentially what he did was contact each of the state agencies and tried to set up internal monitoring within the state would have found very useful, and agencies, which we they designated the assistant or the deputy commissioners of each of the state agencies to be liaison people; but after that two-month period nothing materialized. There's one notebook that essentially material ized from this. That kind of tells what each of the agencies did to address impact problems, but it doesn't have any ongoing monitoring program.

That was an unsuccessful program from the viewpoint of monitoring, but I feel that yes, because so many of the services in Alaska and so much of the information that would be useful comes through state agencies, that it would be very, very helpful to have some kind of program set up that involves them.

And the state-wide one could presumably achieve the same things on the state level that the Fairbanks North Star Borough Centre has achieved on the borough level.



Dr. M. Dixon Cross-Exam by Sigler

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A Well, I think it would

be different kinds of information. It wouldn't be the same types of information, possibly. It would be a different type of information but it would be similar in terms of regular kinds of monitoring and similar in terms of making the information public and in trying to make it useful to the public; but it would be different subjects essentially, that would be covered.



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# Dr. M. Dixon Cross-Exam by Sigler

O Did you find in

setting the North Star Borough Center that there is a shortage of base line to begin with?

Absolutely. Yes, there definitely is and I think that it's another thing when we talk about monitoring or making studies that you can't wait until the day that the pipeline starts ime because you need some kind of depth in what you are doing. Even Dr. Kruse's data which I just made reference to -- his survey I think was very well done and the methods he uses are very good. The information is very interesting. But it would have been especially useful if he had done it five years ago or ten years ago, five years ago, three years ago this year and then five years from now to see what kinds of trends there are because we're involved in a lot of prophecies that we don't understand. There is a lot of evolution or change that is taking place. When you just take one point in time, it's very hard to draw any kinds of conclusions or analysis from looking at a single point in time. I think we need to look at the larger picture.

So that when you answered

the judge's question about divorce rates that your answer was that there was no base line data to begin with so the comparison could not be too precise.

A Well, one of the -let me just clarify that. My answer to his question
is that there wasn't a census available so we couldn't



#### Dr. M. Dixon In Chief

talk about rates because rates would be the number of incidents per population. That's not quite the same as base line because actually with the divorce data, we have been able to get a base line because we are using court dockets and we can just go back in years and get that data the same way we are getting today. So we can get a base line on that. But there are some things that you can't get a base line because nobody kept a record or the methods of record keeping have changed.

Q So the Center then should start up ideally prior to the actual impact being felt in the community?

A Well, ideally -- well, a couple of things I think would be ideal. One is I think the State would benefit from some type of a monitoring program of State agency activities regardless of whether there was impact or not. This just sets what needs were in different areas and how those needs were being met and so forth, just to give a better understanding of what is going on regardless of whether there is any special activities. Then this would certainly provide a base line. But that is you know, two separate kinds of issues.

The other thing that you could do would be some kind of long term regional studies in regions where you are expecting growth over a period of years that would give you base line and data over time -- you know,-- some kind of time depth to what you are doing.



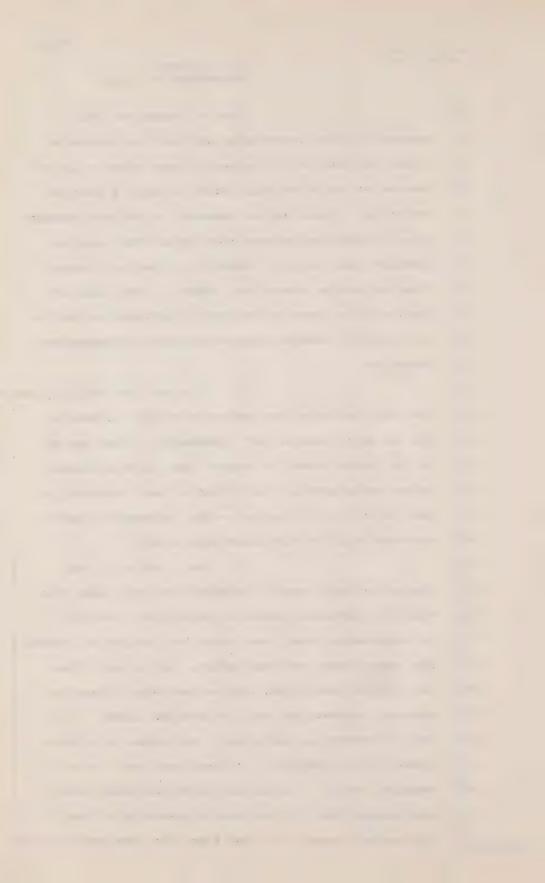
Dr. M. Dixon Cross-Exam by Sigler

Then of course the third approach is that recognizing say that the Mackenzie Valley is going to be a potential area where a lot of changes are going to occur, ought to begin a program now or two years ago or whenever, to collect information or study the Mackenzie Valley so that when the pipeline comes along if there is a pipeline or when other activities come along, there is some kinds of continuity in terms of the type of information that's available for understanding what kinds of changes are occurring.

Q I am not just entirely clear on just who the center was set up to monitor or whom it was set up to monitor to? Presumably, it was set up by the borough council to monitor back to that council or was envisioned initially that it would monitor its results of its information -- the information that's gathered would be circulated more widely?

A Yes. Ithink it was
founded on very broad principles that would make this
type of information public to anybody who wants it.

In other words, that there would be a source of information where there was none before. All of our files,
our reports, everything that we have done is open to
anybody. Anybody can walk in from the street. It's
not for anybody in particular. But since it is being
funded by the community, it does have that kind of a
comunity focus. I think that in my testimony where I
was quoting from Mr. Parr who is presiding officer of
the Borough Assembly at that time, his idea was that this



Dr. M. Dixon Cross-Exam by Sigler

should be a type for information that could be used by anybody in the community essentially who wanted to use it.

Q Was one of its initial functions to assist in the actual community planning by the Council in terms of planning new sub-divisions or whatever within the community?

A Well, not that it would make recommendations in terms of planning but that the data would be there so that people who wanted to make decisions about those kinds of issues could have access to some kind of data upon which to base their decisions.

Q Your evidence was that it has actually assisted the Council in carrying out its planning functions?

difficult question to deal with it honestly because you can -- it's one of those cases of maybe -- you can lead a horse to the water but you can't force it to drink.

If people want to use the information, it's there for them to use. But if they don't want to or if for some other reason, their decisions are being motivated by certain political or economic considerations that are outside of the scope of this particular information, then there is no way that, we are not involved in the decision making process. We are just trying to help people make more enlightened types of decisions.



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Q For the planning process by the borough, do they have the power to make the planning decisions for the community or is there a statewide planning board or anything else that they're subject to?

A Okay, in the borough itself, one of the borough functions is planning and zoning, and there is a Department of Planning and Zoning. We were not within that department and nor did we take over any of the functions of that department. That department continued to function during the whole period that we've been functioning, also specifically for the purposes of planning and zoning. This is in addition to that.

Q But the borough had its own department for that?

A Right.

Q Now, in addition, does
the state have a department of planning that is available
to the boroughs for assistance?

A Okay. The state has
a State Department of Community -- the state has several
planning kinds of functions but the one I think that
would be closest to what you're talking about is the
State Department of Community and Regional Affairs,
primarily though, that provides planning assistance to
areas which are not organized into boroughs. The borough
is kind of like a county. I'm not sure what it would
be equivalent to in Canada, but one of the -- when a



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borough incorporates, it must take on a planning function, but there's many areas of the state that are not incorporated that don't have local government and the Department of Community and Regional Affairs primarily provides planning assistance to -- will provide planning assistance to local communities which do not have borough planning functions, primarily, although they will assist other groups when they're asked to.

Q So where there is an organized borough council, that they take on most of the function themselves?

A M-hm.

Q Is any of the information that's gathered used to provide an input into enforcement agencies, to the agencies that actually enforce, say, the local hire or minority hire policies?

in my testimony, I thought, was a very good one. The special report that we did on Alaska Hire, minority hire, focused in part, on enforcement activities in the areas and the deficiencies which we found in terms of enforcement activities and this report was sent not only back to those agencies but also to the State Legislature and other people on the state government and it was reviewed publically and it was also sent to a variety of special interest groups which were already on our mailing list, such as groups representing ethnic minorities and women and other people that are considered minorities in the labour force. So, by making that



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information public, there was a certain amount of pressure upon those agencies to respond. Indeed, as I mentioned in my testimony, the Commissioner of Labour, read our report and called us to say that he had made a list of all the problems that we had cited in our report and had detailed somebody in his agency to follow up on each of those problems and to come up with potential solutions and it was only after that that the residency card programme was developed, for example, in the state of Alaska. Prior to that time, and one of the things that we pointed out in our report is that people were using driver's licences as evidence of residency and that a person could come to Alaska the very first day and if they had five dollars they could get a drivers licence and be considered a resident. So, they really did address some of these enforcement types of problems as a result of the information, I think, not just that they didn't know that that was going on, but as a result of making that kind of information public and probably bringing some kind of public pressure to bear on them.

Q These state officials that were responsible for the enforcement of these, say the hire policies in Alaska?

A Right. In other words, according to title 38 of the Alaska Statutes, which is the local hire law, the State Commissioner of Labour is responsible for enforcing local hire. One of the things that the State Commissioner of Labour was required to do is set a quota for local hire for projects



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and during the first six months of his tennure, the incoming Commissioner of Labour had never set a guota and essentially nobody was calling upon this individual to exercise his enforcement function that he was supposed to have and I think partially as a result of our report in this area, the Commissioner did come up with a policy. The policy, however, was not to set a quota, but to amend the regulations to give first preference to Alaskans, instead of setting a quota system. Was the Commissioner of Labour operative before the pipeline activities began in the state?

such as the pipeline and one of the things that had

the pipeline began and there was a new Commissioner

outgoing Commissioner of Labour had never set a guota

of Labour appointed, so during the first year

happened is there was an election during the year that

A Excuse me?

Was the Commissioner of 0 Labour something that existed prior to the pipeline

activities?

A Yes but you

see, the state -- part of the problem was, and I think this is a real problem that perhaps maybe Canadians could learn from our experience, the state passed this local hire law in relation to the pipeline, very shortly before pipeline began. It's a way of addressing issues of local hire, but even though the law was passed, the regulations for enforcing the law were not developed



until quite some time later and so there was a big
delay in developing regulations and you know, first you
have the law and then you develop the regulation, then
you set up the institutions to carry out the regulations
and all of this really delayed the enforcement activities
considerably so that the law was essentially ineffective
and has been ineffective until very recently.

For example, the law addressed the issue of hiring, local hiring, but it never addressed the issue of firing or during the lay-off period so that while Alaskans could be hired first, they could also get fired first and eventually this legislative session amended the law to include -- to be a law about local employment as opposed to hiring. So it could encompas various aspects of employment. But, it's taken, -- it's only a three year project and it's taken three years to work out the bugs essentially.



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Q That's another reason

I was asking the question about enforcement. I wanted to ask for your opinion of whether you feel that the monitoring function and the enforcement function should be done by the same agency.

Well, partly enforcement activity ought to include some kinds of monitoring. One of the things that we found out is that the enforce ment agencies were not doing monitoring. For example, again I'm sticking/the local hire situation as one that seems applicable here, there are some I believe 11 different agencies responsible for minority hire activity. It's a very fragmented system. Each of the agencies receives complaints and acts upon specific complaints, but none of the agencies is empowered to go out into the field and to do some kind of survey and find out what the actual overall situation is and to conduct enforcement activities in kind of a class action approach, if you can call it that. Instead, each of the agencies is sitting in its own office, usually in an inaccessible place, usually without very many investigators, and what they can do is receive complaints from specific people and act on them. But there was no monitoring.

All the monitoring of minority hire and Alaska hire on the pipeline has been done by the pipeline companies themselves, and has been submitted to the State and Federal Governments. There has been no independent monitor for those activities to date, and I think that this is a very weak approach



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to enforcement, and I don't know if it would be better to have -- I mean I personally feel that in order to be effective in enforcement that there has to be a monitoring component of the enforcement, you know, that's independent from any contractors and the oil companies.

Q Not to rely on information that the companies provide but have your own information.

Yes. I mean, you know, the system is too open to loopholes, the system that we've been functioning under. But now whether those specific monitoring activities should be done by a group like the Impact Information Centre or should be done by the enforcement group, I think that's open to some kind of question. My preference would be that it should be done by the enforcement group and that the information should be made available to the Impact Information Centre because essentially if we do it the other way around, what we're doing is forcing the Impact Information Centre to have a bigger staff and a bigger budget and to be subject potentially to more criticism for being a growing bureaucracy. I would rather set up a greater co-ordination and cooperation between a group like the Impact Information Centre and other agencies, and put more of the data collection on other agencies.

Q So the data that's collected by the enforcement agency could be used by them, but also provided to the centre.



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A Right.

Q Now, the funding for the centre itself in the North Borough was primarily from borough funds. I understand you mentioned there's also some state funding.

A Right. The first year

the centre was funded through the state impact funds. I don't know if you're familiar with this. Maybe I should go through a little bit of the history about state impact funds, it might be something that you're not familiar with.

When the state leased the land at Prudhoe Bay, it received approximately \$9 million in oil leases, and they felt a portion of that money ought to go towards helping local communities deal with the problems that were generated by that development of the Trans-Alaska Oil Pipeline. So in 1974 the Legislature made a direct appropriation to what they considered pipeline corridor communities, one of which was Fairbanks, and they did this not based on any particular formula or application or anything, they just said, "The Fairbanks North Star Borough gets \$3 million; the City of Fairbanks gets \$3 million;" and so forth. The Fairbanks area, all told, I don't have those figures right with me, I know somebody else here does and I can look it up, they got about \$7 million from impact funds.

Then there was a cry from
the local communities that this was insufficient, and
the Legislature was called back into special session



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that summer of 1974 and passed a second appropriation for impact funds, and this was — this appropriation was given to the Department of Community & Regional Affairs to administer and local communities could apply to the Department of Community & Regional Affairs for funds for specific purposes. These were restricted grants, they were called discretionary grants that were limited to the purchases of relocatable classrooms, to purchase of green space in areas that were being threatened by development, and to I believe operating expenses. They also had a condition attached that the local government could not reduce its taxes — could not use this money to reduce its local taxes responsibilities.

So in this way there were certain funds made available to local communities to direct impact problems, and the Fairbanks North Star Borough decided to use a portion of its funds from that first appropriation to help fund the Impact Information Centre. That's how those funds came into being.

One of the other conditions -those funds were only made available for one year and
when those lapsed then the community took on funding
through local taxes.

Q And that's the way it's

now funded?

A Right.

Q There's no federal

funding then for it.

A No.



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actually funded it.

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Q Now, is there --

A I just thought, I know

you didn't ask this question but I thought I would comment on that a little bit. While it would be very nice to have a little bit more towards the source of funding, and maybe not make the local community bear that responsibility, there has been one advantage of the local communities assuming local funding and that is that they have been very involved in the program and have wanted to have -- you know, they've had control over the program, they've participated in it, they've made demands on it in terms of what they want to come out of it, I think they've used it a lot more than maybe if they didn't have.

Q Because they have

A M-hm.

Q Has there been any

consideration given by the borough of post-construction period monitoring?

this year's funding was for. It's quite a debate. I should say that the local funding has not come easily and there has been much divided feeling about that, especially Fairbanks is a relatively conservative community and has the dominant feeling that people do not want to expand local government, and they said, "Well, we're going to do this for one year to monitor the pipeline, but the pipeline is going to be over this year; why should we continue it?"



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The main argument for continuing it is that the impact of the wind-down period could end up to be as significant as the impact of the construction period.

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1 0 Well in your direct evidence this morning, you stated that it will take years to determine the actual impacts, overall impacts of the 3 pipeline. So I just wondered from that comment as to 4 what monitoring will be done. 5 Well I am sure that after 6 this year, it'll be discontinued unless there is a gas 7 pipeline that people perceive of as being a project that 8 needs further monitoring. However, it's possible that 9 the Impact Center will be discontinued and would be 10 -- as an impact center -- but that the need for this 11 type of community information would be perceived of as 12 being a continuing need and that that center could be 13 modified to serve a similar function in a different 14 context. 15 One of the suggestions that 16 has been made for a long time is that the local library 17 esource should be an information center and should have as a 18 portion of it this particular function 19 along with the function of providing referral and other 20 kinds of information. So, something like that could 21 happen in terms of this program. 22 But right now there is no 0 23 definite decision made on it? 24 No, we are on a year to --Α 25 fiscal year to fiscal year funding basis. So there 26 aren't any long term -- there isn't any long term 27 planning in relation to this. 28

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sense of planning by the borough for the post construction

What about the more general



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period. You mentioned one -- under your summary some of the problems that have been shown is say the housing of the large number of institutional housing structures that have been built such as hotels and that. What is going to happen to all these institutional houses or non-conventional housing that's spread out after the construction period ends. Does the borough address itself to that at all?

everybody is asking. I don't think there was -- I don't think that there was much specific planning in this regard prior to the pipeline. At this point is very strong feelings about the positive value of free enterprise and government not involving itself in business decision making at the local level in Fairbanks. There is a real resistance to that kind of planning in Fairbanks I think.

THE COMMISSIONER: They are discussing that at Kansas city today, I think. Aren't they?

A I think so. So essentially there hasn't been much control in this area.

MR. SIGLER: But has the and post boom construction period put a strain on the provision -- on the local taxpayers to provide the public services, the infrastructure of the community services?

A Well I think the community of Fairbanks made a very conscious decision not to do that. Maybe a lot of the problems that Fairbanks has experienced has been as a result of that decision and



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certain kinds of values. I think maybe values in Canada might be a little different but let me see if I can explain this to you.

THE COMMISSIONER: Fxcuse me.

In Fairbanks, the city fathers really decided to tough it out and not to expand public services to accommodate the influx of population thinking that if they could tough it out then when the pipeline boom was over, they would be able to return to normal civic administration.

Does that --

A Yes, I think that's right. I think several things influences their decision-making. One was the history of the boom - bust cycle and that they assumed that this was going to be another boom - bust situation and that they didn't want to bear the tax burden for that exactly as you explained it.

Also I think that there is a real individualism in Fairbanks which manifests itself in terms of a very negative attitude towards taxes. People wanted to benefit from the pipeline in an individual sense by passing the profits along to and individuals businesses but not in a community sense by undertaking any capital improvement of any significant size for the community. Consequently, the tax rates have not gone up during this period. The bonded indebtedness has gone up primarily in relation to schools which were already overcrowded. But there have not been any specific programs to address pipeline needs through capital expenditures or investments.

MR. SIGLER: Were there any



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recreational facilities added or --

A The voters approved a bond issue for swimming pools in Fairbanks. But that was not prior to the pipeline. They had not been constructed yet. The Borough Assembly has really resisted appropriating the money and getting going with that.

Similarly there is

a conflict between voters. Some voters would like to see more community services but the Borough Assembly which does the appropriating of money is resisting raising taxes and resisting providing of services. So for example, the voters voted for public transportation system but the Borough Assembly wouldn't appropriate the money for it. It's kind of a tug-of-war in that sense because there are different values expressed but the dominant political — the values of the people that are in dominant political positions are not to expend money.

THE COMMISSIONER: Excuse me.

You said that their expectation was that this was another boom - bust situation and we had a panel here that Arctic Gas presented a month ago who discussed the history of Alaska booms and busts. Do you agree that it essentially is likely to be a boom - bust situation?

A I think that's a very complex question. It's one that everybody wants to answer. I think that there is a lot of things happening here one of which is the potential for self-fulfilling prophecy. In other words, if people believe that it's a



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boom - bust situation, then they won't make the investments that will enable the community to grow and then they can bring about a boom - bust situation.

On the other hand, there is a lot of prospects for development in the north which would put Fairbanks into supply and the position of being a and transportation center and possibly continuous growth and if they viewed their role as that role for the future and to expect to create the kind of environment that would enable that to happen then that could happen.

In other words, I don't think that the die is cast necessarily by any -- I think a local community has some controls over that in terms of these decisions are being made but at the same time, the local community is also subject to a lot of forces that they have no control over such as the national and international markets for minerals and other natural resources, federal and policies of the multi-national corporations about where they are going to be investing money and so forth which really the local community has no control over.

So it's a very complex situation of a lot of factors and I don't think I can answer that.



1 0 One other matter. 2 M-hm. 3 O The panel called by 4 Arctic Gas was led by a witness who -- and I've made 5 extensive notes of what he said and I have my notes 6 before me, and I haven't got his name. What was his 7 name? 8 MR. GOUDGE: Mr. Boorkman. 9 THE COMMISSIONER: Boorkman, Mr. Boorkman; did the Commission staff send you his 10 11 evidence to look at? 12 A No, I haven't seen it. I have met with Mr. Boorkman before. 13 14 O Oh, have you? 15 But I don't know exactly 16 what he's testified to. I'm not sure that I'd be 17 prepared to comment; if you want to try me on it, I'll 18 see if I can. 19 Q Well, no, I thought 20 they might have let you see it. I just wanted you 21 to comment if you -- if there was any area where 22 you disputed his findings. He really discussed the 23 enormous in-migration that occurred which so far as 24 they could determine what it was over the last two years, it was something close to 80,000 people state-25 26 wide. Owing to people from the lower 48 coming up, 27 many of them on spec, thinking that they would get 28 big paying jobs on the pipeline and so forth, and 29 then he traced all of the impacts, the effect on

housing, the effect on health services, and so on. It

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was very interesting and very helpful and I assume that it's really authoritative and I just wanted to test that assumption by seeing what you thought of it. So maybe when you go back to Alaska or when you go back, Mr. Roland will give you a copy of that to take and if you have any comments, just write us a letter. We won't bring you back.

> A Fine, I'll be glad to

THE COMMISSIONER: Go ahead.

Sorry, Mr. Sigler.

do that.

MR. SIGLER: Q Well, I was just trying to test you out a bit on your conclusion where you didn't want to answer the question of overall, has it been positive or negative for the people of Fairbanks, and your answer to get around it you said there was positive and negative elements of it. I wonder if you could just set out some of the more positive and negative elements of what's happened in Fairbanks, just in summary.

All right. There's a lot of ways to approach this. As I said what could be considered positive, you can do it by groups that are affected in different ways, or by factors of what happens in a community or so forth. In general the positive aspects have been increased employment opportunities, very rapid upward mobility in terms of jobs and employment and income for local people. is one aspect that I didn't have specific data to share with you on, but at the Alaska Science Conference

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preliminary findings from his study which were astounding, and I'll just kind of make reference to them and tell you that this isn't my data and it's preliminary and so forth, but I think that it kind of suggests the magnitude of that situation.

which was held two weeks ago, Dr. Kruse presented his

If you'll give me just a minute I'll comment on that because I think that it illustrates what we're talking about.

In 1973, 35% of the population had an annual income, family income of less than \$12,000.

By 1976 only 9% had an income of less than \$12,000.

This is reported income from the survey.

By the same token in 1973, only 6% of the population had an annual family income of \$40,000 or more; and by 1976 39% of the population was reporting a family income of \$40,000 or more.

Of course he has figures in between there that suggested a significant shift in terms of family population toward a much higher family income.

At the same time, because the labor market has increased significantly, both due to expansion created by a fast-growing economy and direct pipeline impact, there have been a lot more jobs available at the local level than there have been before, and few people to fill them. Consequently people were brought into the labor force who had never entered the labor force before and were in some ways disadvantaged in terms of working either because of their education or their minority status, English

as a second language, or being handicapped or whatever. So there's been a lot more employment opportunities for people that didn't have them before, and a lot more rapid advancement.

So I would say that those are probably the basic kinds of benefits and maybe benefits that could possibly flow from those things such as people perceive positive changes in their lifestyles as a result of greater income.

In terms of negative aspects,
that increased income and so forth represents to some
extent inflationary effects of the pipeline, and that
inflation has certainly hit hard among people who are
on fixed incomes, people who are not engaged in
pipeline jobs, and people who are dependent upon
government services which are -- or government employment,
I guess it's like having fixed income but incomes which
are set by federal standards which don't take into
account the local situation.

This has created a lot of problems particularly in regard to shortages for housing in the community, which has required much more intense competition for housing and people who cannot afford housing have gotten into real problems, and so forth.

that have been coupled with the rise in incomes.

There have been certain -Q I take it just on that ,
you say things like the cost of housing has gone up,
together with a corresponding increase in the costs



at all, right?

A Well, the cost of housing is kind of an interesting question, I think it's gone up for a number of reasons. We've had some situations where landlords have simply tried to take advantage of the situation and have escalated rents in disproportion to costs and this --

Q There's no rent controls

A The state instituted an Emergency Rent Review Board eventually, to try and deal with some of these kinds of problems. So that -- you know, that's been a problem.

of the things that Dr. Kruse's study has shown is that even the people who felt that they had benefitted from higher income, due to pipeline, felt that they had sacrificed certain values and that this was a negative aspect. In other words, they might be receiving benefits in terms of incomes but they were paying costs in terms of sacrificing their values and similarly the people who did not participate in pipeline employment felt that they had — and felt that they had not sacrificed values necessarily, felt that they were bearing more of the costs of the pipeline in terms of changes in their lifestyle in terms of changes in their — the purchasing ability, their incomes and so forth.

Other kinds of problems -- I guess I've been addressing this from the point of view of how people perceive their own situation. Now, that involves their own value judgement of what -- you know,



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what they're -- where they're at and one of the things that Dr. Kruse's data showed is that people that, overall people felt that the community had changed for the worst in just an overall sense. People who had lived there less than 2.5 years -- 48 percent said they felt the community had changed for the worst and people who had lived in Fairbanks more than 9.5 years, 62 percent said they felt the community had changed for the worse, so there were these values that people associated with pipeline that showed that they were both -- you know, he asked :-- for example, do you feel that you have borne the benefits of the costs and overall, except for the people that had been in Fairbanks less than 2.5 years, that's since the pipeline construction began, and most of the people in the Fairbanks community, more people said they had borne the costs than benefits. For example, 16 percent of the people there 2 to 10 years said they had received benefits, but 50 percent said they had borne the costs and so forth.

Q It must be difficult in measuring impact to answer that, I can appreciate, because all the benefits you're given are very tangible ones that can be measured where the disadvantages you've mentioned are all intangible ones that --

A Yes, and this is what people are actually perceiving and again, I'm referring here, not to my own studies but to Dr. Kruse's,

Now, if I refer to my own studies, I have a very hard time with this because what you're essentially asking me to do is look at a



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looking at community wide data rather than change perceived data from the individual and look at a change and to try and tell you whether that change has been positive or negative and let me tell you the kinds of problems that I find with that. I decided that the number of divorce complaints has gone up. Well now, I could impose my middle class values on that and say, "Gee, that's a terrible thing", or I could follow the advise of one psychiatrist in Fairbanks who listened to this data and said, divorce is a happy solution to a bad problem and what you're forcing me to do is say, can you count increased number of divorces as a negative thing for the community or a positive thing and what I would rather do to you is say, you give me the area and I'll tell you the change and then you decide whether that's been positive or negative.

Q Crime and protection of the people and public protection in Fairbanks.

A Okay. The crime rates have certainly gone up and I can cite the figures for you if you would like, on that.

Q If you have them handy.

A Yes, it will take me

just a minute to talk about that.

Okay, in terms of overall complaints, now, I'm just citing figures from the Fairbanks Police Department. The Fairbanks North Star Borough includes both the city of Fairbanks and it's larger areas. As I mentioned earlier, the larger area

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is part of a State Trooper detachment that includes a much larger area and we don't really have the figures; just for the Fairbanks North Star Borough. This is just the area of the city of Fairbanks, which is basically the core area.

Q Right, and the Commission has already heard evidence saying the relationship between the state police and the Fairbanks police department.

A Right, okay.

So, for the total number of

I think we need more time depth, we need to go back further than that, but the pipeline started in '74, but from 1973 to 1974, and these are calendar years, not fiscal years that I'm citing the data for -- the number of complaints to the police department increased by 35 percent and from '74 to '75 the total number of complaints increased by 42.9 percent. The figures which I'm citing, incidentally, are from Impact Information Center report number 24 and I believe this has been submitted as evidence too so that you can analyze these in a little bit more detail by looking at them yourself.

Specific areas in which there were increases that were perhaps more dramatic than in other areas are in areas of robbery, which increased -- and again, I don't like to use percentages either, because sometimes you're talking about very small numbers, that when you talk about percentages, it looks very dramatic and this is something that the news media has tended to do. They'll tell you that there was a

300 percent increase in rape or something like that and then you look at the figures and it goes from two to six, and I'm not saying that's not 300 percent, but the magnitude of the problem might be very much less if you deal only with the numbers and not the percentages.

THE COMMISSIONER: The news media wouldn't do that in Canada.

A Well, I hope not. So,

I urge you to --

MR. SIGLER: At least not

today.

A I urge you to look at the actual figures as well as the percentage figures when you're assessing these kinds of things.

O Yes.

A Anyway, I think the real problem areas have been things like, auto theft, robbery, assault on police officers and other kinds of assault. There's been an increase in arrests for prostitution and commercial vice. I'm not sure that that arrest rate reflects -- to what extent that arrest rate reflects any changes in crime. I think it more reflects -- it reflects to some extent changes in behaviour, but it probably to a greater extent reflects changes in enforcement activities.

There have also been increases in narcotics law violations and drug violations and areas like that.

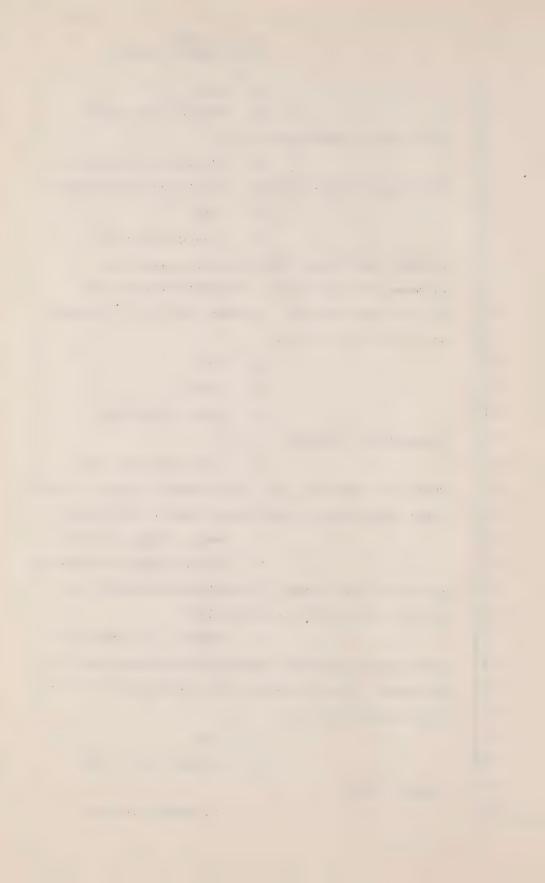
THE COMMISSIONER: Have you

got any figures relating to those last two items?

Because the last two matters would have some bearing on the influx of people engaged in organized or semiorganized criminal activity, that is prostitution and the use of heroin and other drugs, which we would all deplore, I should think but do you have any figures on those last two items--



[]	
1	A Yes.
2	Q That would be useful
3	that would be meaningful to us.
4	A I'd like to associate
5	with these figures at least a little bit of explanateon,
6	Q Sure.
7	A I'll give you the
8	figures first, since that's what you asked for.
9	In terms of prostitution and commercialized vice
10	in 1973 there were two arrests; in 1974, 16 arrests;
11	and in 1975,68 arrests.
12	Q 68?
13	A Right.
14	Q What did you say,
15	"prostition" and what?
16	A Commercialized vice.
17	That's the category, and I don't know if that's a tested
18	legal definition of prostitution versus other kinds.
19	Q Well, anyway, carry on.
20	A And in terms of narcotics
21	violations, the number of arrests went from 182 in
22	1973 to 276 in 1974, to 221 in 1975.
23	Q Would in Canada the
24	narcotics law includes the use of substances such as
25	marijuana, so that narcotics law violations in Canada
26	are a misleading guide.
27	A Yes.
28	Q Do you know if that
29	applies there?
30	· A In these particular



figures which I have there's not a distinction made and I'm sure that many, many of those arrests involve marijuana arrests as opposed to arrests for hard drugs. Let me just digress a minute and try and explain what I think I know about these areas, and these are areas that everybody wants to know about highly and are areas that I don't feel/qualified to discuss, and I'm really aware of the limitations of my own knowledge of these situations.

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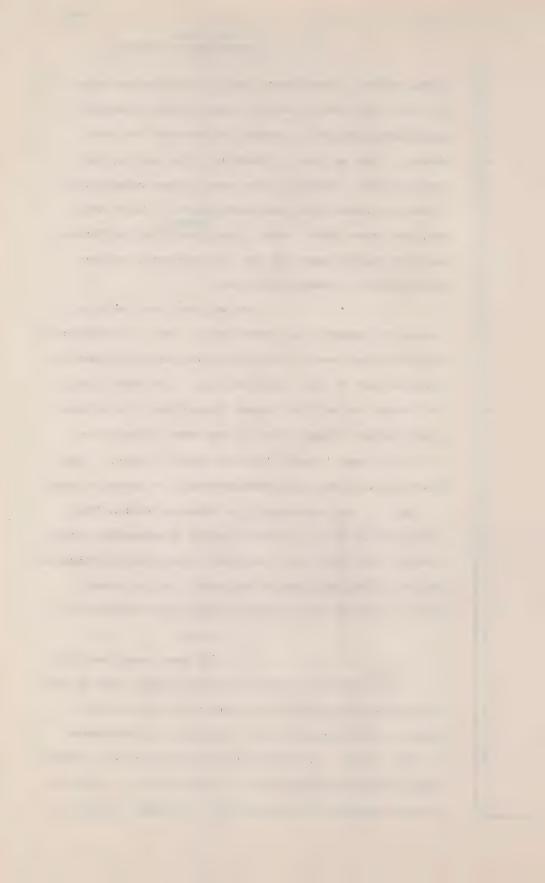
Let me just start with a couple of comments on prostitution. One is historically Fairbanks has been a place that has accepted prostitution as part of the local culture. It wasn't until 1950 when the military bases forced the city to make prostitution illegal that it was even illegal, so it's only been illegal for the last 27 years. Many Fairbankans look upon prostitution in a generic sense

look upon it with a certain amount of nostalgia about the good old days when everything was kind of colorful and so forth, and that there wasn't any -- there isn't a very strong negative value associated with it.

Q I see.

A The real negative value

comes with two kinds of prostitution, one is that associated with organized crime and nobody really knows to what extent that's happening in Fairbanks at this point. The other problem is that we probably have had an over-abundance of prostitutes in relation to the demand in the community. It's made prostitutes



a lot more competitive and it's changed the whole so to speak. structure of the delivery system, They no longer operate out of bars and, you know, telephone booths, but they're now out onthe streets and they're accosting people on the streets and this is kind of an embarrassment to the city and as well as being uncomfortable and a lot of other problems have been associated with it in terms of street crime, and a certain amount of knifings and brawling in the streets and rollings and other kinds of activities, and I think this is what upsets the local community. So this is probably a greater reason for the crackdown in enforcement. It has to do with wanting to protect the reputation of the community and to make the streets safe, more than just any kind of innate feeling that prostitution is inherently negative.

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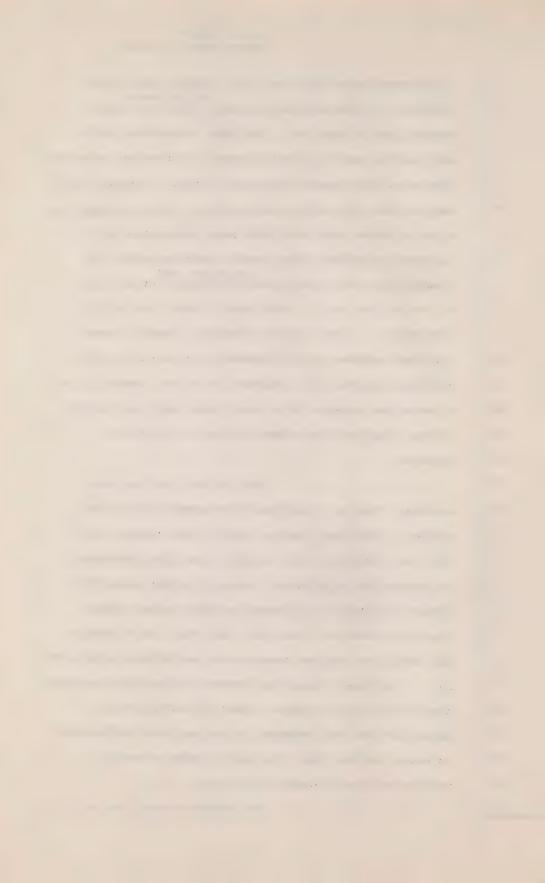
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Part of the problem with cracking down on prostitution or gambling for that matter is that you need an under-cover force, and it's very difficult for a small town like Fairbanks to operate an under-cover force. A person makes one arrest and they're no longer an under-cover agent. Everybody knows who they are, and they can't seem to get people to perform under-cover activities effectively. So like I said, the arrest is kind of a reflection of changes in the way that prostitution is being carried out, changes in the way that enforcement is being carried out, and also to some extent a problem with enforcement activity.

One comment about the narcotics



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law violations. There was a big effort that took maybe a year of investigation, and there were a lot of arrests that followed that involved heroin, and made it look like there was / cleanup and so forth. What essentially happened was that there was an informal network in Fairbanks through which most of the local people that were involved with drugs could obtain their drugs, and it was mostly being bought from friends who maintained their habit by selling, essentially, but it was not organized crime. It was a local thing. Well, police investigations cracked down on all the local dealers who were dealing to their friends primarily, a but they couldn't infiltrate the next hierarchy and consequently what happened is they cleaned up the streets from the local dealers and they forced those using drugs to go into -- to the organized crime, and the prices on the street doubled, according to my sources, and that was just about the time that we had a rash of armed robberies and bank robberies and all kinds of things.

So I'm not sure that, you know, that the approach toward law enforcement didn't really aggravate some of the problems instead of cleaning it up. So I think when we look at these figures, there's a whole lot happening behind them.

Q Oh yes.

A That don't necessarily

get reflected in those figures.

MR. SIGLER: Well, has

law enforcement generally been a problem for the

Fairbanks Council to deal with during the construction phase?

thing it's been very difficult to keep police officers. The pipeline has paid more for one week of work than what a police officer can earn in a month in Fairbanks, and there's been a relatively high turnover rate among police officers, and the staff—the Police Department are under-staffed, and so it's very difficult for them to carry out their activities, to investigate reports of crimes such as burglaries and so forth. Many times they go uninvestigated and are never brought to trial because there isn't a big enough staff to deal with it.

Even when they do try to for recruit, they can't find housing / the people they're trying to recruit, and it's been a real problem maintainthe Police Force. Then the second problem has to do with when you have a Police Force and you're trying to deal with problems such as you know, related to vice kinds of laws, that we need an under-cover force which is virtually impossible to maintain in a small town.

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THE COMMISSIONER: Commercialized vice. Vice that has not been commercialized is in another section of the Criminal Code.

A You are a man of the law and I am not. But one of the things that I might suggest that might be very useful for the Federal Government or State Government to do is one of the approaches that we understand is happening in terms of organized prostitution -- now whether that is linked to organized crime or not is that there is a ring that sends prostitutes in a circuit that includes Fairbanks, Anchorage, Valdez, Seattle and so forth, is they rotate the people around fast enough that they can't get recognized too fast by the local law enforcement people. It seems that we could learn from that experience and develop a police force that could function like a ring so that people on the street wouldn't necessarily be able to recognize the undercover people. You know, you could draw upon that.

MR. SIGLER: With the advantages of having other than purely local police doing the enforcement of it.

A Right.

Q What about the training Parties the local police? Is that done locally, the training of new police officers?

A I don't know too much about that. I know that State Troopers are primarily trained in Sitka at an academy there. I don't know exactly where training occurrs for the city police or if they



## Dr. M. Dixon Cross-Exam by Sigler

hire people out of that same academy or they try to recruit from outside. I just don't know.

Ω What about the prosecutions of the -- is that done by the City as well?

A I'm sorry, would you repeat ---

Ω The prosecuting or taking

through the courts -- is that prosecuted

by City lawyers or is that done by State or Federal
lawyers?

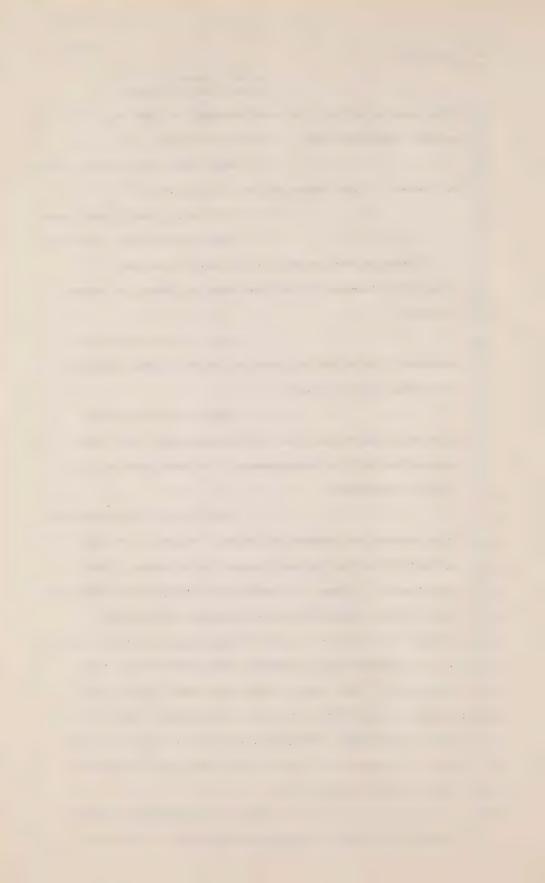
A Well it depends on the nature of the crime but most of that is done through the State court system.

Q What about the other protection services other than police say like fire prevention or fire departments? Is that done by the City of Fairbanks?

A The City of Fairbanks has fire protection responsibilities. There is no fire protection in the borough except by voluntary fire departments. There is currently a study being made of that by Chip Wagner for the Fairbanks North Star Borough. It has to do with comprehensive fire planning. He is accumulating figures on fire problems of fire protection. That study should be ready fairly soon. Because he was doing that for the Borough under contract with the Borough. We didn't engage in repeating that kind of research so I don't have very good figures to offer on fire protection.

One of the potential problems though that I will suggest to you that he suggested

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#### Dr. M. Dixon Cross-Exam by Sigler

1 is that traditionally when you've had a -- when you are 2 involved in a boom - bust economy or if you are when there 3 is a levelling off or when people have over-invested, 4 is that the rate of arson increases dramatically during 5 the period after the pipeline. They are expecting that 6 to happen in Fairbanks. I don't know. 7 Q Has there been a problem 8 keeping trained fire fighters, the same problem 9 with the planning with police officers and losing them 10 to pipeline work? 11 A Well, not really because 12 there isn't a class of fire fighters on the pipeline. 13 You know, there isn't that class of employee . 14 THE COMMISSIONER: You have 15 security guards and the police can fill those niches. 16 A Right. 17 But you don't have fire-18 fighters. 19 Α Yes. The one place that 20 you do have an overlap has to do with the fire department 21 provides an ambulance and emergency medical services 22 in Fairbanks. There is a series of medics or emergency 23 medical specialists in -- they aren't really emergency 24 medical specialists but paramedical personnel in the 25 pipeline camps. I don't really know to what extent that's 26 been drained off the fire department staff. 27

THE COMMISSIONER: Mr. Sigler, I think we'll adjourn for coffee because Dr. Dixon's had to talk now for about an hour. But just a couple of

MR. SIGLER: Do you have any --



## Dr. M. Dixon Cross-Exam by Sigler

questions before we adjourn. What about the V.D. rates? Is there any correlation between those and the expansion of prostitution or any correlation between those rates if they have gone up and any other activity that you want to mention?

A Yes, the main -- let me just take a moment to be able to cite some figures in conjunction with my answer. I'd like to say the figures I am using are from Impact Information Center report number ten so that you will be able to go back and review these if you'd like to.

I want to approach that from a different perspective before I answer your question directly. There has been a very definite impact on the State Health Lab which provides the laboratory tests for venereal disease. That impact is due to a couple of things. One is every pipeline worker that gets hired has a physical exam which includes an RPR which is a test for syphilis which is then sent to the State Lab. So the number of syphilis tests that the State Lab has been conducting has escalated in direct proportion to the pipeline hiring situation.

For example in 1973, the

State Lab processed 4,745 RPRs and in 1974, after the

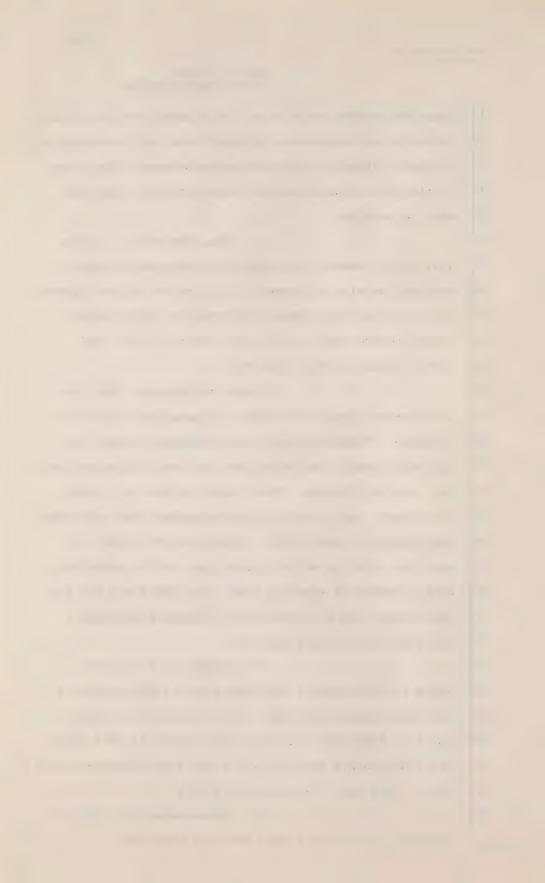
pipeline had started, that was for a period of from

April to September. In that same period in 1974 after

the pipeline had started, the State Lab processed 12,892

RPRs. That was an increase of 171.7%

 $$\mathbb{Q}$$  Those were just tests for syphilis. It doesn't mean they are positive.



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29 30 That's just tests.

Exactly. O.K. But the point is when you are going to do more tests, you are going to pick up more positive reports too.

O Yes.

Α In fact the number of positive RPRs -- now this does not mean the number of cases because some people might have been tested more than once, you know, to validate their tests -- went from 36 in 1973 for that same period to 71 in 1974 which was an increase of 97%. So essentially what you are doing is you are screening more people. You are picking up more cases. THat, you know, when you have -- you cases know those / could have been present in the population before. They could have been present in the populations outside. But we are seeing more positive tests but then we are seeing a whole lot more tests.

Similarly for gonorrhea tests, the number of tests increased. Now this doesn't have anything to do with pipeline physicals because that isn't a part of the pipeline physicals. The number of tests themselves went from 1541 in 1973 for that same period to 1710 which was an increase of 11% but the number of positive tests in spite of that increase in the total number of tests went from 181 to 143 which is a decline of 21%.

> Yes. 0

Essentially I think what's Α happened in Fairbanks and maybe in Alaska in general is that people are becoming a lot more sophisticated about



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## Dr. M. Dixon Cross-Exam by Sigler

V.D. and about getting treatment and that it's not the kind of disease maybe that it used to be that it went undetected for long periods. So I think people are reporting or coming in for tests — you know, reporting themselves essentially and there's a lot more people are seeking tests and a lot fewer cases are determining so I think essentially that there is a pretty — that even though there is a much higher rate of V.D. in Fairbanks than most U.S. cities because there is a very, very young population that is presumably very sexually active that the health care delivery system is set up in such a way that this is not — you know — that people are getting treatment.

I would say that most of the people for example who engage in prostitution are very aware of that potential danger in their profession and seek treatment and tests you know, fairly regularly.

I don't think that prostitution has been a major cause for an increase in V.D.

My second question. I said that prostitution is a source of concern among other things because it may be an indication of the presence of organized crime. But there is another aspect to it that may be related to the first. Are the -- there appears to have been an increase in the incidence of prostitution and the number of people plying that trade appears to have increased significantly in Fairbanks. Are the people from the lower 48 or has there been recruitment -- we are all starting to use this jargon you know -- but has there been recruitment



# Dr. M. Dixon Cross-Exam by Sigler

from essentially the young native girls in the Fairbanks vicinity? Is it possible to make any comment on that or is it --



I'll try and avoid your

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and my definition involved an economic system that's pretty specific and basically pretty culturally determined and I think that there's lots of different types of sexual behaviour in Fairbanks and I'm sure that some people can look at some types of behaviour and call it prostitution and other people would say, it's not that at all. It's just what debauchery 0

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everybody has their own definitions of prostitution

question by answering it this way. Essentially I think

or what, just so that we can pin this down a

A Yes. I think that there's very different mores and different attitudes towards sex and sexual activities and sexual partners among different groups in the population, both different ethnic groups, different age groups, different peer groups of different types and in some ways, sex can be an entre into certain groups and I think we've seen thatin terms of a lot of the teenage runaways that we've seen, that that's a part of that whole system, but I wouldn't call that prostitution in any formal sense. I think one of the better studies that I've seen on this subject was one done by Hugh Brody in Canada, which --

> He was here and testified 0

about it.

Did he testify to that? A



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Well, I think that he took a very -- tried to do away with some of the cultural biases in terms of using the terms.

Q The study of "Skid Row"

in Edmonton.

- A Right.
- Yes.
- A And I think he kind of

explains the role that sex has in terms of the lifestyle of "Skid Row" and I think in Fairbanks we have a certain number of bars and people who frequent bars regularly and certainly sexual activity plays a part in that whole lifestyle, but I for one, would not call it prostitution. Most people don't sell their services although they might gain something material from it, in terms of food or clothing or housing or something else but it's not the same kind of economic arrangement that our culture has traditionally defined as prostitution and I think that it's oversimplifying a situation to view it in that same context and in fact, I think part of what some of the problems that we've had in terms of street problems have been partially racial problems but partially problems in terms of differences in terms of approaches to sexual behaviour. For example I think that among young people today, there's much less formality, you know, and much -- and sex is not a difficult thing to come by, well, that takes a certain out of looking to buy group of people sex essentially, they aren't customers anymore, where they



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might have been before and that provides a certain amount of competition to prostitutes which might be one reason why prostitutes have gone out onto the streets to solicit is, because there just aren't as many customers, not that there aren't more men available, but that men aren't seeking sex from prostitutes because they don't need to so much.

So then, this makes it

more difficult for prostitutes to earn an income and secondly, a lot of the prostitutes in Fairbanks have viewed native people and women in the native bars as being a threat in terms of competition to their trade and this has caused a certain amount of racial -this has been manifested in terms of both racial problems in that many of the prostitutes working the streets are black and many of the disputes have been between blacks and natives that have started -- you know, from this kind of difference, you know, hostilities to some extent as a result of viewing that occur economic competition, really. But then, there have been traditional racial hostilities between blacks and natives in the city anyway, I think in terms of territorial problems.

Again, I really caution analyzing this situation in terms of prostitution particularly among native people. I just don't think that's a part of their whole cultural -- a part of the whole culture that would manifest itself that way.

Does that answer your question



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Q Yes. What about the first part of the question, are the people engaged in prostitution from the lower 48?

A Yes. A whole lot -- most of the people, you know, the professionals. A whole lot of them. We've had local prostitutes that have been with us a long time, the police know who they are and most of the people that have been coming in have been coming in from outside, California, Nevada, Seattle, so forth.

Q Yes. Just let me ask
you to consider this again, putting the word prostitution
to one side, has there been a tendancy, now this all
depends on the extent to which there are native villages
within the vicinity of Fairbanks, I suppose, and I
don't think there are many, but has there been a
tendancy for young native women to be drawn into the
"Skid Row" of Fairbanks? Putting it that generally, has
that occurred? Could you comment on that?

kind of hard data to support anything that I could say on that, and it's not been a subject that I've studied, you know, specifically, but, young people in general, I'll start out with that and then address young native women, but in Fairbanks in general, there's been less supervision of young people and young people have been more likely to be in the bars and in the areas that you might call Skid Row. My own experience as a counsellor in a family planning clinic for five years now, has been that this is a trend that has been developing



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regardless of a pipeline being there. That teenagers in a small town tend to seek out experiences of that nature for a variety of reasons, but I think that a lot more native people are coming into town seeking pipeline jobs and that there is a large motivation for people from the villages -- you know, part of the whole urban system among native people in Fairbanks is that if you want to find friends from the villages, one place that you know that you can find them is on 2nd Avenue and that there's a very -- you know, that it's not unacceptable to move in and out of bars on the street and so forth, in terms of looking for your friends and visiting with them and so forth and that often times that this makes liquor and drugs and other activities much more accessible to young people in an urban area than maybe what it would be in other places.

Q Right, well --

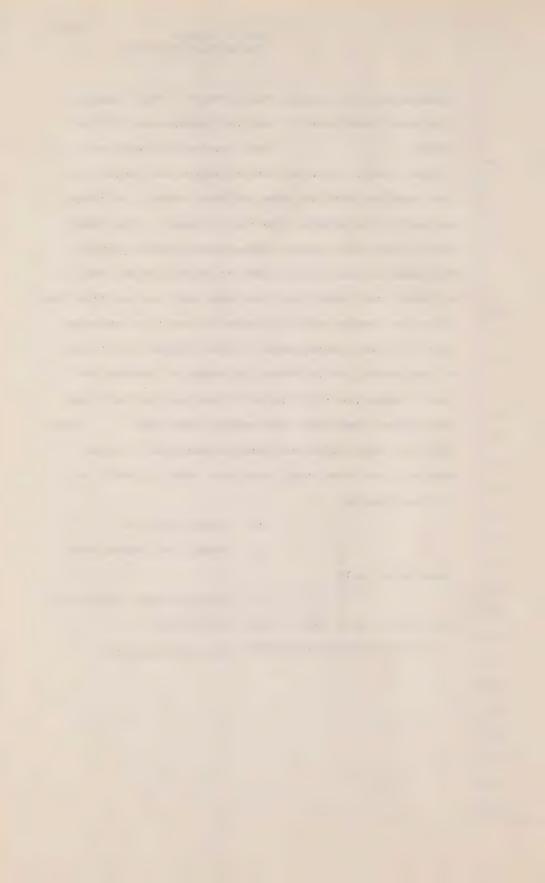
A Does that answer your

question at all?

Q Yes, it does, thank you

Dr. Dixon. Well, we'll stop for coffee.

(PROCEEDINGS ADJOURNED FOR A FEW MINUTES)



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### (PROCEEDINGS RESUMED PURSUANT TO ADJOURNMENT)

THE COMMISSIONER: Well, those

are all the questions I have for the time being, Dr. Dixon, so I think we're still with you, Mr. Sigler.

MR. SIGLER: Right. There's

just a couple of questions I wanted to ask you just to finish off with what I was getting at earlier.

You commented, in answering my earlier question, about the Council of Fairbanks not spending public funds for physical services during the construction period; then in answering the judge's questions you commented on -- in commenting on the increased crime rate -- about young people involved in liquor and drugs. Is there any correlation between the two? For example, I think it's specifically the answer you gave me about recreation facilities and no money having been spent. Can you relate the one to Would more funding or more spending on recreation facilities by the Community of Fairbanks have alleviated the crime problem for young people?

I'm sure that there are those people what would agree with you about that. I certainly don't have any evidence that would either of informasupport or refute that. One bit tion that I would like to suggest to you is that the combination of the double-shifting in schools and the increased employment opportunities has made it possible for young people, teenagers in particular, to obtain jobs where they might not have been able to before, and we did a survey which was done in



January of 1975 that indicated that approximately 50% of the High School students were working, and I think in a sense this is something that many High School students see as being a positive experience although it created certain kinds of conflicts between school and work. But it's not a case of High School students sitting around with nothing to do because there are a lot of jobs, and I think typically in small towns, even if they create recreational facilities for young people this doesn't mean that young people, that that's what they want or that that's what they're going to use, that they won't find other activities to get in trouble or whatever. So I think in some ways the creation of new jobs has provided certain kinds of activities for young people that they didn't have before which might have made for a better environment for teenagers from 'their perspective, and at the same time had that lack of supervision and perhaps the lack of recreational facilities that might have given the kids more time to get in trouble too. I'm not sure that recreational facilities is the answer. I don't -- I certainly don't have any data which suggests that it is, although I realize that that argument is often made. I just feel ill-equipped to comment on it, you know on a direct relationship between the two.

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Q M-hm, and the other thing, in your evidence you mention about the what you call non-conventional housing. What about from a safety factor as far as questions I was asking about



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fireproof protection services? Have these types of non-conventional housing raised any problems from that point of view?

There are many people who A feel that that is the potential problem, particularly using structures in the wintertime that aren't properly insulated and then turning up oil furnaces to the point where they become fire hazards and so forth. Many of the kinds of unconventional housing use wood as a source of heat, which creates more chimney fires and that kind of thing. So that hypothesis has been putforth and again I don't really have any data on incidence of fires and what kinds of structures, but I believe that data will be available from the study that I mentioned the borough is conducting, so we will have access to try and test that hypothesis. All I can say is it's not an illogical hypothesis, and other people have put it forward, but I can't really contribute anything towards saying whether that was true or not.

Q How is it that these non-conventional type housing come to be used? Does the borough or the city or state or some agency not have the power to inspect, or aren't permissions required or inspections required before people can start using sub-standard structures for housing?

a couple of perspectives. One is there is a building code inside the city, but there isn't outside the city in the borough. So no, there are no inspections

### Dr. M. Dixon Cross-Exam by Sigler

outside the city. That doesn't mean all the unconventional housing is outside the city. There is some inside the city, but the building codes are not rigorously enforced, and particularly during the period where there is a housing shortage, I think there's been a real and where rapid construction activities which have made a lot of demands on the building department of the City of Fairbanks, and there's not been a high priority on either inspecting or condemning sub-standard Also Fairbanks has traditionally tolerated units. a variety of housing types and styles and unconventional housing. This has been part of the whole frontier lifestyle, so to speak, is having people living in places like cabins that don't have plumbing or electricity or so forth, and there's a lot of tolerance for individual variations that way.

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been in terms of community values, a high priority on eliminating that housing, and to the contrary, during a housing shortage there's probably been more concern about people finding places to stay than there is eliminating unconventional housing. So we're seeing a proliferation of people living in trailers that weren't meant to be lived in in the winter, or living in saunas or tents or, you know, whatever they can find to live in. In addition, there's been a real proliferation of rooming houses where there aren't any codes about that type of housing, and the codes that there are, that might apply aren't being enforced very much.

O But there are standards,



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Dr. M. Dixon Cross-Exam by Sigler

at least for some of them, but the city has been unable or unwilling to -- or has chosen not to enforce those codes. 29 1 



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Dr. M. Dixon

Cross-Exam by Sigler Cross-Exam by Bayly Yes. There are certain standards in the city but not in the borough and the city both, I think, has chosen not to enforce also has been preoccupied or over-worked with new building inspections and that just has been a lower priority in enforcing existing building. MR. SIGLER: Thank you for That's all I have on that. answering my questions. MR. ROLAND: Mr. Bayly? CROSS-EXAMINATION BY MR. BAYLY: Q Dr. Dixon, I realize that what you do is you collect information and make it available to whoever wants it and that what you try and avoid doing is assigning values to it which are your

own or those of the group that you work with and be the value judgment to those who will take your information for whatever purposes they want it.

But I take it you are also in the Impact office looking at possible impacts of the pipeline and assessing them even though you may not go as far as to draw value conclusions. Is that correct?

Well, currently I am not working for the Impact Information Center and so I probably have felt a little more liberal to speak about my own interpretations than I was when I was working at the Impact Center but I think that it is important that a community function such as the Impact Center tries to and I think that there is certain safequards built in that enable such a center to try not to reflect the values of any particular individual or group.

### Dr. M.Dixon Cross-Exam by Bayly

All right but you do look at certain things that are traditionally thought of as indicators of social impact in an area as opposed to other things. Some of these that I could suggest to you and you can tell me whether they were included would be increase in the number of jobs, increase in the amount of money, stresses on physical facilities in schools and hospitals?

just clarify one thing. I don't know where you are leading with this but I just thought I would mention this Our advisory committee, which is pretty broadly based essentially tells us what areas they want us to research. So essentially the decision isn't coming from within the office so much as from an advisory committee composed of different groups within the community.

Q Right so you react to them and yet you wouldn't want to study things that perhaps are too far off base to be an indicator of anything.

The increase in bubble gum sales is unlikely to tell you anything about the impact of the pipeline for example.

A Yes, I think that's a

logical --

Q Yes. They stick to traditional things that they think of as being areas where the stress will show or where the benefits will show. Included in those I would suggest to you are the structure of existing services and you looked at those when you were at the Impact Center. Is that correct?



Dr. M. Dixon Cross-Exam by Bayly

at the

Q And/patterns of the use

of land?

A To some extent. I wish we had done more of that. There is a lot of areas that I personally as a social scientist and also as a member of the community wish that we could have looked at more in greater depth and that certainly would have been one. But there hasn't been too much of an emphasis from our advisory committee to do that.

Q So in that sense, the use of the advisory committee had its disadvantages in that you responded to it more than went off in your own direction?

A Well, I think you get a very different result from being a community directed research model that I would call ours versus being a research model that derives out of some academic focus or social science focus. Certainly if I had the leeway I probably would have studied very different -- some very different things than what we studied through the center. So --

Q So where a community based impact assessment center is a useful tool, it should not be the only tool of assessing the indicators of impact on a community of a project like the Mackenzie Valley pipeline.

A I would definitely agree

with that.

Q You borrowed studies that other people have done in fact. You referred to Dr. Kruse's



study and Dr. Baring-Gould's study from other areas to give you at least a library of the information that you didn't collect yourself?

A Definitely and I think also that kind of helps you have some comparative information too. It kind of points out areas that maybe we ought to be looking at that we haven't.

Q Your concern was that when you started collecting -- one of your concerns was that insufficient collecting of base line data had occurred prior to your office coming into existence.

A That's right.

Q So that made the comparison with what had gone on before far more difficult.

A Yes.

Q Now, can you outline for us in the Alyeska situation what areas pre-pipeline data gathering was conducted in the Fairbanks area, if any?

information gathering program prior to the Impact
Information Center. At least not that I am aware of.
So there wasn't anything that was done formally. So what we have done is try to look at sources of data that we would be using anyway and just try to take that data back in time. Or if there are reports that have been done -- I can give you an example of a report that was done that can maybe suggest what you are talking about but it's so rare that it is the exception.

When I was in Juneau recently

I came across a study that had been conducted by the

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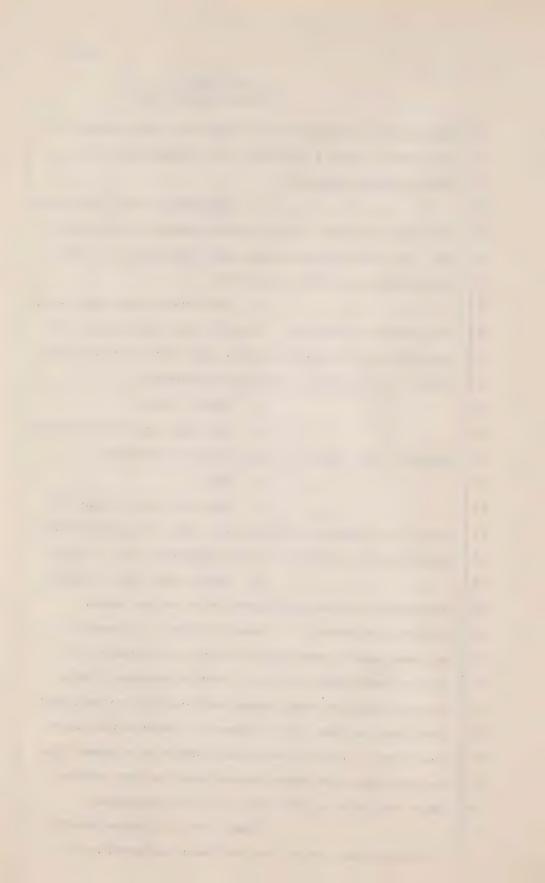
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#### Dr. M. Dixon Cross-Exam by Bayly

Department of Health and Social Services on the characteristics of food stamp recipients in 1973 a line perfect base study. Nobody had even told us that it was around. I came across it and brought it back and talked to Sue Fison who is the director of the Impact Center now who is duplicating that study for Fairbanks to see what changes there have been in the characteristics of food stamp recipients. Ideally, many studies like this could have been done in '73 or '72, '71 or 1970 that could be duplicated at this point to look at changes in the structure of the community.

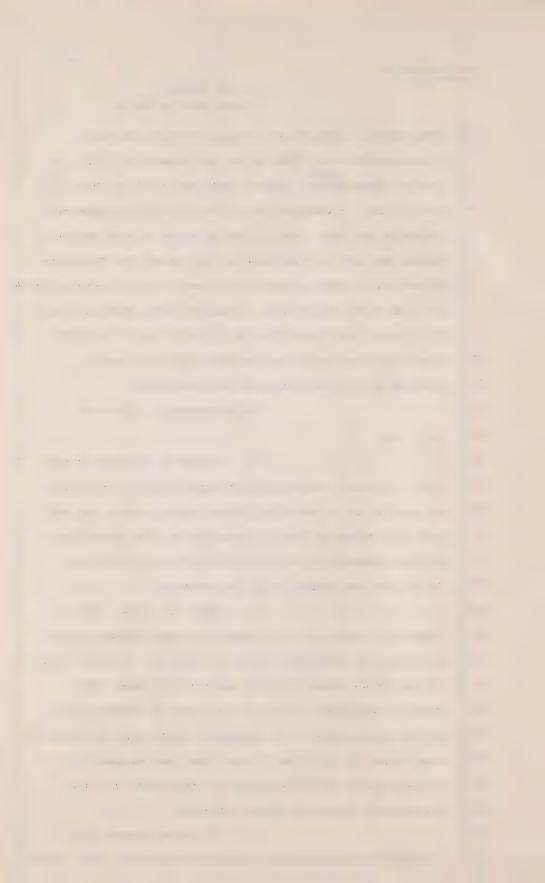
Unfortunately, I know of

very few.

Q Would it be fair to say that you would recommend that anybody who is thinking of setting up a community based impact center try and get that going as soon as possible in the Mackenzie Valley communities so that that information on what it's like now anyway could be gathered?

A Yes, for sure. And in just going back to your comment you made before about a variety of different kinds of studies. I think that in one of my comments about what I felt that the Federal Government could do in terms of encouraging social scientists to do studies and developing programs is that this can serve as a base line just be getting studies going in these kinds of areas that are not necessarily directly impact related.

Q You were uneasy about information that had been collected even the year before



#### Dr. M. Dixon Cross-Exam by Bayly

the actual start up of construction and I assume that was because that was a period that involved people coming in on speculation and the build up of the equipment and supplies.

- A That's correct. Yes.
- Q You would have to go back before that period to start gathering your base line data.

A Yes, I think time depth is something that we need to kind of deal with as a methological problem. I don't know of anybody that is really done too much work in that area to find out how long of a time depth you need to be able to identify trends. But certainly five years is better than two and ten years is better than five and twenty years is better than ten. So, you know, my feeling is the more time depth you have to look at trends, the better you are going to be able to do an assessing, the meaning of the information that you have now.

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Q And provided the information

Q Now, I gather one of the difficulties -- and you've alluded to it in the answer to the last question -- is that there isn't a very good indexing system, even for what was available in Alaska. You came across a study that you knew nothing about, after you needed it.

A That's true.

A Yes, and let me just

Q And does that mean that there may be information which is not in the public domain that contains this kind of baseline data or some of it in Alaska today?

qualify my comments too by saying that when I started with the Impact Information Centre I was not -- in some ways not equipped for the job in that my own training did not include a review of the literature specific to this particular subject, and once I was employed in that job, this was not the kind of activity that the local community wanted me to be performing. In other words, they didn't want me to be sitting in the library at the university doing a bibliography; they wanted me to be out collecting data. So while I think doing bibliographic work in a literature search would be a very valuable component to what we were doing, aside from the kinds of piecemeal things that we did do, there was never a concerted effort to do that and I think there should have been. It's something I've been working on in conjunction with my book but was unable to do at the Impact Centre.

was in the public domain, it wouldn't be necessary for the community-based Impact Centre to collect it as long as somebody did and made it available.

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I'm not sure about Α that, though. You know, a library is something that not everybody either knows how to use or is familiar with using, or comfortable with using, and sometimes the way that libraries are set up, the information is not -- it's so time-consuming to acquire, that for example, if a local business person wanted an answer to a question, it's possiblethey could go to a public library and have access to the same data that we had at the Impact Centre; but No. 1, nobody in the library would know where it was or what it was, or be able to quide them with that; and No. 2, that that person wouldn't know how to find that information; and No. 3, finding that information would be so time-consuming that a person wouldn't bother going to the Public Library; but if they knew that there was a central source for this type of information, where they could get some kind of assistance in finding the information they were looking for, or referral -- a lot of what we did was referral work -- then they would be much more likely to avail themselves of the information in spite of the fact that it might have been available from another source.

And you feel that perhaps a community-based organization where people are at ease coming in and using your facilities might be one that would get more use because people were more

comfortable with it.

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function could have been performed as a part of the library that had set up a special room or a special program physically for this purpose. I'm not saying that it has to be done through this particular type of local government structure. I think that there could be a lot of flexibility in how it's done, but I think it's important to say that there is a source — a place that is specifically designated to assemble this information and to distribute it; and again a lot of what we did was not just collecting reports, it was, you know, processing our own information and putting out reports and doing that kind of thing.

Q Now, one of your concerns that you have on page 15 under the heading:

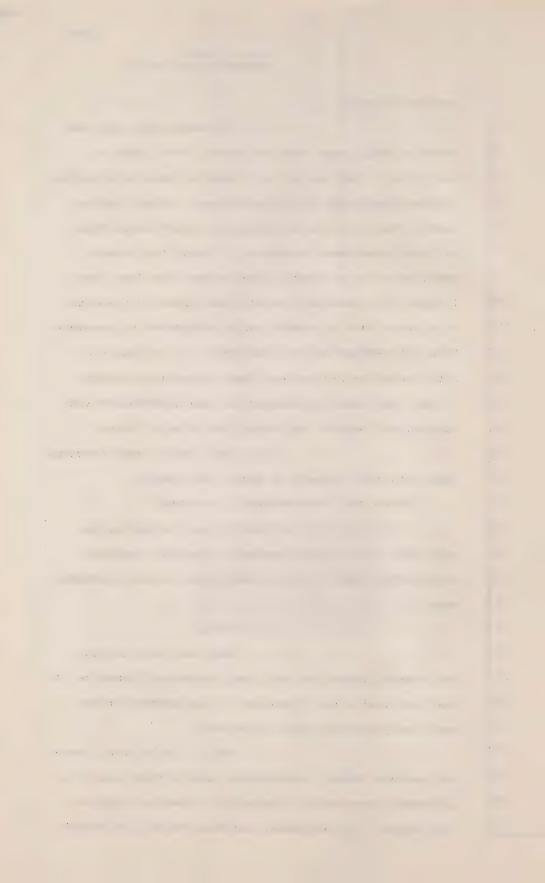
"Vocabulary is exceedingly important,"

is that in your situation you said that the business economic interests dominate politically, and I gather that refers to the Fairbanks area.

#### A M-hm.

Q Now, was that through
the form of organizations like Chambers of Commerce, or
was that individual companies or businessmen or how
was that political force organized?

A Well, I think that there are certain formal institutions that provide political leadership such as the Chamber of Commerce, they're very strong in Fairbanks, and then there is a variety



1 of other ways that those values are implied and affect 2 the political structure of the local community in terms 3 of leadership, in terms of decision-making, and so 4 forth, that in terms of a general conservative 5 approach to the decision-making processes in the 6 local government that reflect a lot of the values of 7 business industry. 8 And are you telling us 0 9 that in a town like Fairbanks that a member of the 10 Chamber of Commerce might be on the City Council, 11 might be a supplier to the pipeline company, etc. 12 Α M-hm. 13

And it's for that reason that I gather you have to be very careful to make sure that you weren't aligned/with that group or with a native organization or a consumer protection organization, or with an oil company.

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A M-hm.

And you've interestingly included in special interest groups that you had to be concerned about, the government itself.

Did I?

On page 14.

Because I would call them

a special interest group in that context, yes.

Would you consider it to be a special interest group in the Alaskan situation ? Let's refer to the municipal level of government to begin with.

> Well, it was very important A



for us, you see, we were under a borough administration and one of the things that was very important for us in terms of local politics was to be autonomous from the mayor, and the local government situation, was and it /very important that we weren't a part of the mayor's office and we were not a P.R. person for the mayor, and yes, that was true.

Q All right, and did you run into situations where you felt that the state government was a party with a special interest?

A Yea, I think so. We certainly found situations where again instead of state government I kind of refer to agencies more because state government is not so homogeneous that the level that we dealt with them for different agencies, and certainly these agencies have an interest in perpetuating their own bureaucracies, protecting their budget and so forth —

THE COMMISSIONER: It's hard to believe.

A Excuse me. THE COMMISSIONER: Nothing.

I was just passing a comment. It doesn't matter.

important for -- not to become a spokes person for any of those agencies or essentially to buy into their goals any more than any other group. Of course, there's a certain amount of pressure to do that.

And I think it's very



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MR. BAYLY: Then in following up a question of Mr. Sigler's as to whether you would have been more effective, had you been a state-wide series of offices, would you feel that you are better off being an office with no ties to any government or

Well, you'd like -- ideally

government agency? In a state sense.

you'd like to have ties in terms of co-operative working arrangements in terms of sharing data and having access to data and so forth, and you need other people, it's not like you're keeping yourself that way, but ideally you would like to have the autonomy or -- you know, to be able to feel as though you can be honest and not subjected to pressures of either interpreting the data or avoiding printing certain kinds of data or keeping certain things secret or functioning as a mouthpiece for any group without looking at all the sides of the issue and so forth. So, the ideal is not that you remain totally separate, but that you establish working relationships, but that nobody has the power to control the information, because information essentially is power and you don't want to be in a position of letting the center be used by any particular group. You want to

Q One of the concerns that has been expressed in evidence before this Inquiry is that not only industry, but certain agencies of government are proponents of development and is that a concern that people expressed in the Fairbanks area

make sure it can be used by everybody so that there's

checks on that kind of power.



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That they are proponents Α

That they were proponents 0

of development.

Of development. Well, Α

I think --

of --

That was of the pipeline 0

development.

Yes. I think that was kind of a -- that's kind of an understatement. That was an accepted assumption or fact that it wasn't that it -- I guess it raised concern in that, for example, with an advisory group, they tried to balance those interests with other interests. Let me just give you a little bit of history on this.

with regard to government and the Alyeska project?

When the idea of an Impact Information Center came up in the community, the Chamber of Commerce wanted very much to have that be a part of theirfunction and one of the arguments in terms of the -- before the Borough Assembly, it said if the borough was going to appropriate this money that they should appropriate it to the Chamber of Commerce to carry out this function and there were a lot of people in the community who said, no, the Chamber of Commerce is a special interest group, we need to make this autonomous: from the Chamber of Commerce and in fact when they appointed the Advisory Board, the first thing they did, the first two members they appointed, one was the

 President of the Chamber of Commerce, the other was
the Chairman of the Social Concerns Committee of the
Fairbanks Council of Churches, who, presumably, represented
different kinds of values than the President of the
Chamber of Commerce.

So, all along there has been an attempt to balance the interests in relation to the center.

Do you feel that the fact that governments took a proponent stance with regard to the Alyeska project that you had any difficulty in obtaining information you would have liked to have had?

- A From whom?
- Q From the various govern-

ment agencies.

the government went through a change -- the state government went through a change, pre-pipeline to shortly after the pipeline was started. There was an election and a new Governor was put into office and he's been publicly much more reserved or less enthusiastic or more cautious, however you want to put it about approaches to development and many people in the business community would say that the state government right now is anti-development and that many of the state agencies are anti-development.

So, perhaps that might have been true prior to the time the pipeline was started,



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but in the span of time for the impact information center, I would say that that state government -- most of the agencies of state government do not necessarily represent industry and that this would not be a factor in terms of getting information from them.

Q Right.

A I think the other

factors that I outlined are probably much more significant than that would be.

Q Do you feel then that the government not only went -- government agencies not only went through a change in political leaders but that they went through an evolution within themselves with regard to their perspectives on the pipeline development?

A Yes. I think it's really

hard to talk about -- different agencies are very different, you know, and in some cases the administration of those agencies really didn't change. I'm not saying that every agency's top administrator -- every commissioner changed because that didn't happen every time, but I think -- maybe this is a cop-out, but everything is always evolving and you're not dealing with a static set of circumstances. You're dealing with a set of circumstances that is changing continually and that you're adjusting to somewhat. I'm not sure if that's answering your question or not. You want to try me again?

A No, I'm -- I understand

that there are different agencies that have taken different positions and that they've changed, I gather in your assessment you watch the agencies as well as



the pipeline company as well as the people coming in, the crime statistics. Is there a general trend or does it depend on the agency to such an extent that you can't draw any conclusions?

A Well, this particular -is there a general trend in what? Would you be more
specific in your question?

Q. Has there been a general trend in the government agencies to move from a stage where they were pro-development to a stage where they are now anti-development or much less pro-development?

A Yes. I would say that there has been a general trend in that direction.

Q And would you --

A I think that's under

the leadership of the new governor.

Q Yes, and would you attribute that to impacts of the Alyeska project?

A No, because one of the things we found is that the people in Juneaureally don't know what's going on in Fairbanks.

O Isn't this where we

came in?

know, it's funny because a state that size, many of the commissioners have never been to Fairbanks and we hear pipeline all the time in Fairbanks, pipeline, pipeline every day and it seems like the most overriding factor in the whole community, you know, and you go to Juneau and you never even hear that word, I mean it's just



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not a big factor in their lives and in their decision making and in their awareness of what's going on in the states and I would say that perhaps that might be a small part of it. The state government is much more concerned right now, about outer Continental Shelf oil development than they are about pipelines and in a sense, I think part of their decision not to place a greater emphasis on monitoring this pipeline had to do with their priority that they're giving to outer Continental Shelf development problems and that they kind of wrote this one off that it's too late to do anything about it now, you know, already, so let's focus on the next thing that's coming up, and are really giving a lot of attention to outer Continental Shelf oil development right now.



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Q So your local concerns are not state-wide and they certainly aren't even top priority in your opinion of the State Government?

A Right. I would say at
this point the State Government has kind of taken the
attitude -- well in fact, this Governor when he came in
in his state address inaugeration address said that he
felt that we should be at the point that the benefits of
the pipeline should be outweighing the costs and therefore

he was discontinuing impact funds and the community should find a way to reap the benefits at this point.

You know, basically there was an attitude that this one is behind us now and let's move on to the next problem and essentially that this problem was created by the last Governor too. So the current Governor doesn't really have to accept too many of the responsibilities for this one. So he just doesn't want to botch the next one.

Q So this again would be another reason why a local impact information center might have a greater chance of survival through the length of the project than one which was funded from a farther distance away from the impact?

A I think that's true. Of course, one of the values I think of this center is to bring problems of the local community to the attention of the State agencies and the governor and so forth in Juneau and maybe they wouldn't want all these problems brought to their attention considering that they have a lot of other problems to deal with. So I think that in



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a sense that this gives a greater reason for the information being generated at the local level.

Q Now on pages 17 and 18 of your evidence, you talk about the carrying capacities of the various community resources and you state that some of them appear to have been taxed beyond their capacity. Now I take it that if in the Mackenzie Valley we are to learn from this, it would be sensible if we are going to be able to predict any of the impacts to assess the resources we have and their carrying capacities prior to approval of any project.

A That's the point exactly.

Q Was that done in Alaska

at all?

statements were written for the TransAlaska pipeline but giving it a little bit of a historic context, at that point, in our nation's history there was an environmental movement under foot and the National Environmental Policy Act of 1969 came out of that environmental conservation movement. That was of course the directive that led to the dividing of environmental impact statements. The real political forces at that time indicated that it was necessary to address the impact from a natural environment. But people had given very little consideration to the social environment or the socio-exonomic environment, however you want to call it.

The major consideration in terms of the social environment was as it related to the natural environment and more specifically how changes in



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the natural environment could affect subsistence activities primarily and the lifestyles of native Alaskan peoples.

However, there was very little consideration of what we would call social environment how and the construction of a pipeline would affect these other kinds of -- these components of the social environment. So while -- and the need for regulations incidentally have been refined to stipulate more and more that these concerns be addressed. But at that point, these concerns were addressed only minimally. There was nothing that involved the kinds of sophistication that I am kind of calling for here.

O Now I gather that local community resources can be assessed in different ways by people with different interests. Would you recommend that that assessment be carried out at least in part by a community based organization or a series of them so that those things that have to do with attitudes towards those services can be expressed in the need as well as the agencies that are responsible for them in their assessment of the facilities?

important to work with the local communities at every level in terms of doing research in the local community.

But I think sometimes local communities don't always have the experience or the knowledge or the tools to be able to do an adequate kind of assessment by themselves. So I would say that, yes, it is important to work with the local communities and to take into consideration

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their own concerns. But it is also important to get some kinds of trained personnel who can do an effective and reliable job. Let me give you just kind of an example of where I think you can get a problem. This was even -- not at the local community level but even at the State level.

I was trying to do some research on community mental health indicators. I found that there had been an assessment of community mental health problems and facilities for Fairbanks. It was a state-wide kind of plan butFairbanks was included in it. based on -- I believe '72 data. I thought "great". I started going through it and the person who did this had had some training but not very much. One of the things that she did and I discussed it with her later -- Fairbanks came out looking like it -- of all places in the States -- you know -- it had by far the best indicators in terms of a positive community mental health picture and more facilities than what they could use and so forth.

The reason was because she made a distinction between military facilities and non-military facilities and did not include in her report the military facilities. There are two large military bases in the borough -- in the Fairbanks North Star Borough. So she only included local facilities. In other words, community facilities and State funded facilities and so forth. But she did that in comparison to population size. When she used her population figures, she used the population figures and included



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the figures from the military bases. So what she really did was her use of those figures -- and it was not by consciously trying to manipulate the data -- she was just naive enough not to know she was making a mistake and those figures essentially minimized the problem. In other words, it looked like there were much fewer problems per population size than what there would have been if she would have been consistent in using the right population figures with the right facilities.

So I think what you can get is a very meaning people trying to assess the carrying capacity or the magnitude of existing problems and so forth who can make errors in methodology which can really make their efforts futile in providing the kind of accurate information that need. So I think we need both the expertise and the local input.



A You've used that word

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Q All right, realizing that the community may not have the expertise; would you feel that an organization like the one that you're associated with would be an appropriate vehicle to gather some of the more subjective community attitudes which might be essential in looking at the whole picture of the capacity of the local community-based resources.

"attitude" a couple of times so I want to pick up on that, and refer again to Dr. Kruse's study because it's the first attitudinal study that I think I've seen that's really outstanding, and I think attitudes is one area that you have to be especially especially careful in terms of the methodology of sampling, in terms of your construction of your questionnaire that you use, or your research tool because this is an area where the researcher can really affect the results of the research significantly and/really need to place a lot of control on that kind of a study, and I think this is perhaps even more so . attitudes even more so than other kinds of indicators which are may be a little bit less suggestive. For example, the way you question is going to really determine a lot of times what kind of an answer you get, and again a group that maybe very well-meaning may spend a lot of time and energy going throughout the community asking a question and yet when you get the answers that you get might be relatively meaningless because that question could have been interpreted in several ways or because of the way the question was phrased. So I



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would say that particularly with regard to attitudes there needs to be some kind of expertise employed in order to get the kind of data that's going to be useful. I don't know if that's --

Q That's fine. Let me approach the question from the other end of the --

A O.K.

THE COMMISSIONER: Before you

do that --

MR. BAYLY: I may forget it.

THE COMMISSIONER: I think

certain members of your family feel this has gone on long enough and --

MR. BAYLY: I didn't know we

were related sir.

THE COMMISSIONER: I must say

I share their point of view, but obviously we won't finish the evidence of Dr. Dixon this afternoon, and Mr. Goudge advises me that we can safely adjourn until tomorrow without having a night sitting tonight. So -- but he does say that if a night sitting is necessary, it might be tomorrow night. But he said there's moneed to have one tonight because it might turn out to be unnecessary -- if you follow me.

So if you don't mind, Dr.

Dixon, we'll ask you to remain until tomorrow and suppose we start at 10 A.M. and we'll finish with your evidence, I'm sure, sometime tomorrow morning and then you can get back to Alaska. O.K., so we'll adjourn them.

(PROCEEDINGS ADJOURNED TO AUGUST 18, 1976)

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DATA DATE

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